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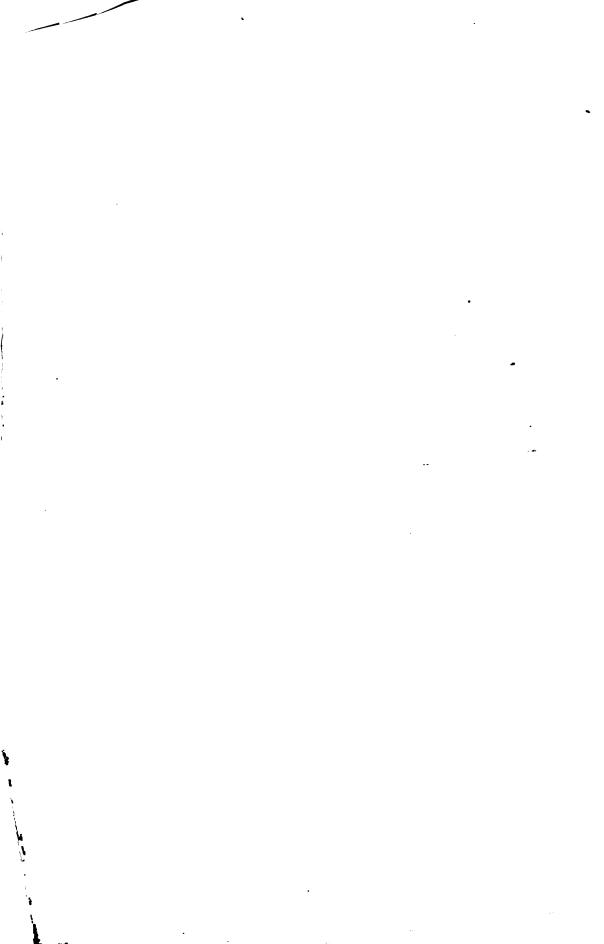
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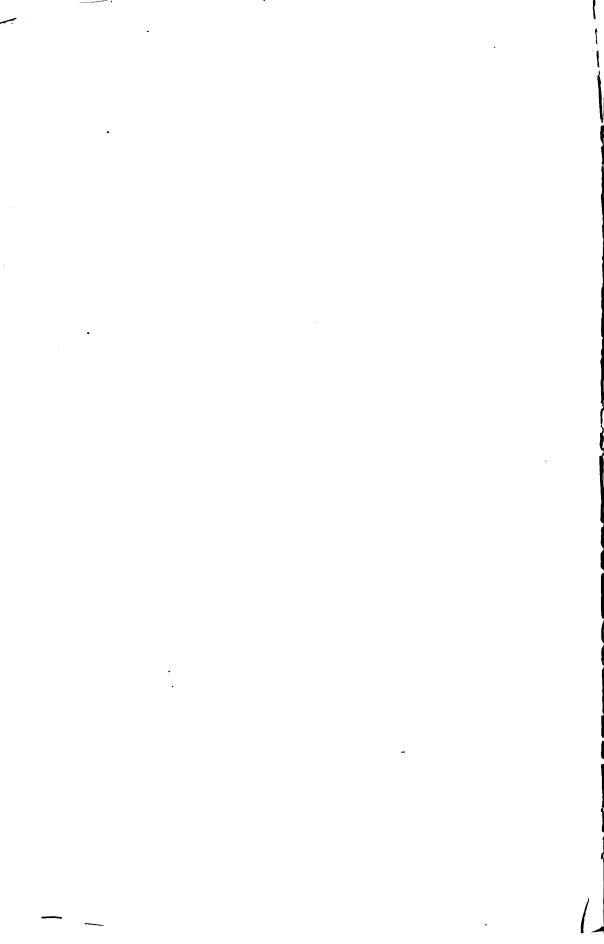
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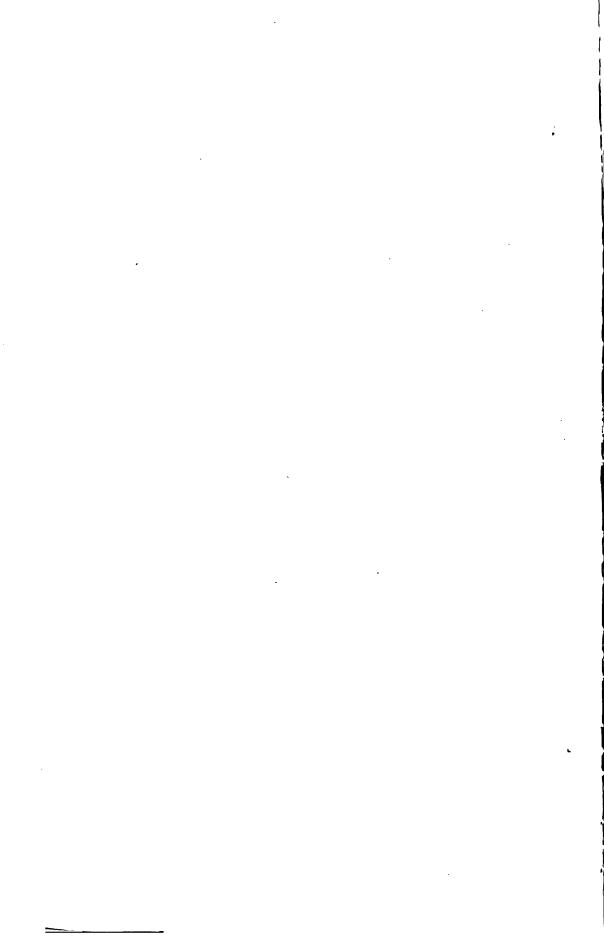
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HISTORY OF ART IN PRIMITIVE GREECE. MYCENIAN ART.



Ant in Primitive Greece

MYCENIAN ART

FROM THE FRENCH

OF

GEORGES PERROT,

PROPESSOR IN THE FACULTY OF LETTERS, MEMBER OF THE INSTITUTE, PARIS,

AND

CHARLES CHIPIEZ.

ILLUSTRATED WITH FIVE HUNDRED AND FORTY-FOUR ENGRAVINGS IN THE TEXT, AND TWENTY COLOURED PLATES.

IN TWO VOLUMES .- VOL. II.

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PRIMITIVE GREECE:

MYCENIAN ART.

CHAPTER V.

SEPULCHRAL ARCHITECTURE.

Funereal Rites.

THERA and Troy are unlike Mycenæ in one respect; tombs there have not made good the silence or lacunæ of tradition. No graves have been discovered at Thera, and no data have come to confirm the hypothesis of an incineration necropolis at The enormous pithoi found in such vast numbers in all the strata, have been recognized by all competent authorities to be cellars.1 As regards the vases with rude representations of the human face, which Schliemann at first identified with cinerary urns (aschenurnen), they were quite innocent of ashes (Fig. 244).2 Human remains have indeed been collected in half-a-dozen pots or so; but nothing about them shows their mounting back to high antiquity. There are reasons which tend to prove that the sepultures in question (see Fig. 66) date from the period which succeeded the fall of Ilium, when the hill, almost desert, was used as a burial-ground by the surrounding peasantry. The remains of the dead found a more secure resting-place in a soil composed of ruin, than in the adjoining

> ¹ Schliemann, Bericht; History of Art. ² Schliemann, Bericht.

plain, frequently disturbed by the overflowing and change of bed of the Scamander.

The only sepultures that we may safely call archaic are those that have been recognized towards the foot of Mount Hanai Tepeh, on the summit of which stood the Hellenic temple of Thymbræus Apollo.¹ Below the ruins of this sacred building, relics of a prehistoric village have been uncovered. The pottery is as uncouth as in the lowest strata at Hissarlik: nearly all the implements are made of stone and bone, and bronze is hardly,

Fig. 244.—Ilios. Clay vase. One-third of actual size.

if ever, seen at all.² Here and there skeletons crop up, now on the rock itself, now somewhat higher up, on a spot which seems to represent the site of certain ancient dwellings. The dead were laid out on the bare earth, their faces turned to the west, and their knees doubled up. They lighted upon no grave hollowed in the solid rock, or made of brick or stone; one and all were mere holes dug in the ground, wherein the bodies were placed. The exceptions to this universal rule are tombs built with unburnt brick for two infants. Remembering that the only

¹ History of Art.

² SCHLIEMANN, Ilios.

mode of disposing of the body known to Homer was by cremation, Schliemann fully expected to find traces of fire in the several tumuli still visible on the Rhætheum and Sigeum headlands, as well as on the many eminences which dot the plain; the more so that throughout antiquity down to our own day, local tradition associated the "tells" in question with the names of Aiax, of Achylles, and other Homeric heroes. Schliemann's intense amazement, however, the sixteen tumuli which he laid open 1 were without result. Vases and implements, very similar to those of the two first settlements at Hissarlik, have only come from the Kara-Gatshe-peh, or Tomb of Protesilas, on the European side of the Hellespont; but no human remains were found therein. The mounds of the Troad have furnished Hellenic pottery in abundance; but potsherds of undoubted antiquity were exceedingly rare. If these researches have failed of their purpose, they have yet proved that tumuli never ceased to be raised in the Trojan plain, down to the end of the Roman empire, in imitation of those which apparently belonged to the heroic age; but although their situation is in perfect accord with the Homeric information, they have kept their secret.² If there is a mode of burial which has been established for the period under consideration, it is inhumation in its most simple form, such as we find it in the lowest stratum of Hanaï Tepeh. Similarly, we find inhumation, but this time with a tomb built and prepared to receive the dead, on the western shores of the Ægean, the scene of Achæan civilization, whether in Argolis, Peloponnesus, or Central Greece.

The tombs of the princes who built the mighty walls of Tiryns are as yet unknown; the oldest sepultures which have been exhumed in this district are the shaft-graves enclosed by a ring of slabs, which Schliemann discovered in 1876.³ As is well known, he at that time believed in partial cremation.⁴ But the fallacy of his theory has been demonstrated both from his own narrative and the condition of the bodies, some of which

¹ Schliemann, Ilios. Upon these tumuli, see also Virchow, Berliner Gesellschaft für Anthropologie.

² Schuchardt, Schliemann's Ausgrabungen.

³ History of Art.

⁴ Schliemann gave up the cremation theory, and stated in writing his change of front.—Trans.

had apparently been partially embalmed, to preserve them until they were buried out of sight, as well as by the grave furniture extant at the time of discovery.¹

Interment is made even more manifest in sepultures belonging to this same epoch, but which are regarded as later in time than the pit-graves on the Mycenian acropolis: we refer to the domed-tombs scattered over the land stretching from Laconia to Thessaly, and the rock-cut graves designed for persons of lower estate, which have been more especially studied in Argolis. Among those who have excavated the necropoles under consideration, Stamakis is the only one who noticedas he thought-traces of partial cremation apparently carried out in the vault or pit itself, after the fashion imagined by Schliemann. He was present at the opening of the pit-graves at Mycenæ, and his testimony relative to one of them fully bears out Schliemann's own statement; whilst on the existing portion of the old pavement of the tomb near the Heræum he picked up ashes, along with human bones which showed marks of having passed through fire. He concluded from the fact that as fire has left traces on the stones of the pavement, and smoke has blackened the lower face of the lintel, the body had been consumed on the spot.2 Finally, MM. Koumanoudis and Kastorchis, in their report drawn up from notes left by the late Stamakis, mention having found calcined bones in the principal tomb, which was filled with undisturbed earth. But whether the said relics are human or animal bones is a secret which they have kept to themselves.

To the above conjecture we would oppose a prejudicial observation. We know by recent experience that intense heat of some hours' duration is required to consume the fleshy portion of the body. If the ancients succeeded but imperfectly by means of a great pyre set up in the open, which was fanned by the passing breeze, how much less could the operation be carried out in an unventilated chamber, or at the bottom of a pit? At most they might perhaps have roasted the body; but to have reduced it to the condition of a mere bag of bones had been

¹ SCHLIEMANN, Mycence. See also Helbig, Das Homerische Epos, and Tsoundas (Έφημερίς, 1888). The state of most of the bones collected in these graves proves that they were never thoroughly mummified.

² Athenische Mittheilungen, 1878.

impossible.1 There is no occasion to resort to an impossible hypothesis in order to explain the presence of calcined bones and traces of fire in the graves. The Spata and Heræum hypogæa are admitted to have been rifled at an early date; Stamakis himself recognizes that they were opened for the purpose just referred to and for subsequent burials; and that bones which had not passed through fire were found in them. But how is it possible to pick out, among these remains, those that belong to the first interment from such as are of more recent date? As regards the ashes and stains of smoke on the floor and wall of these chambers, they find a natural explanation in the sacrificial fires which went on here in honour of the dead. The passage leading to the tomb of the Heræum was apparently accessible throughout antiquity.2 The country folk who used it as a shelter for themselves and their flocks must not unfrequently have lit a fire in front of the doorway. Stamakis was an intelligent and close observer; yet it is not impossible that, prepossessed with the notion that he should find here traces of a funereal rite coinciding with that described in the *Iliad*, he may have seen more than reality warranted. Had Stamakis lived to pursue his researches in this domain, he would doubtless have reached the same conclusions as his successor, based as they are upon the excavations of the bee-hive graves of the lower city at Mycenæ (1887-1888).8 In the fifty-two graves opened by M. Tsoundas were several skeletons, which had evidently been placed there whole; they had not been laid out at full length on the ground, but were found in a half-sitting posture, the head raised as if reclining on a pillow, the legs bent, and the knees high. These, however, were exceptional cases. The bones, in most of the graves, had greatly suffered either from damp, aggravated by the falling in of the roof, or later rebuildings and But none of them, says M. Tsoundas—who examined with minute care these relics—showed certain marks of fire. does not feel justified to absolutely deny that bodies were not

¹ Experience soon taught the Hellenes how difficult it was to obtain complete combustion without the help of a strong breeze. As Achylles lights the pyre which is to consume Patroclus, he calls to his aid Boreas and Zephyrus, tempting them to come fan the flame and enliven the fire by the offer of sacrifices.

² Athenische Mittheilungen, 1878.

³ Upon these tombs, see ante, p. 355.

cremated during the period to which these graves belong; but, as far as his knowledge goes, there is no sufficient data to warrant him to decidedly state that such a case ever occurred. The only mode of burial which has been firmly established here is inhumation.

These conclusions have been confirmed by the study of other necropoles of similar date. Thus, the vaults hollowed out in the flanks of Mount Palamidi, having a close resemblance to the similar graves at Mycenæ, have disclosed nothing which would point to cremation practices.1 Several skeletons were found whole, laid out on the bare earth; the traces of fire left on animal bones and broken pottery had come from the sacrificial brazier. Human bones, even when discovered in great confusion and scattered round about, betray no sign of having been placed on the funereal pyre.2 Near Epidaurus, M. Staïs opened several vaults, akin to the Nauplian examples. In one of them he found four skeletons, almost intact; they lay on the soil, their heads propped up against the wall, and faced the entrance. For obvious reasons, the value of the evidence supplied by the domed-tombs can in no way compare with that which we owe to the shaftgraves. The scanty information which we get from one or two of the bee-hive sepulchres favours rather than not the burial theory. At Menidi, one out of six skulls was almost uninjured; 3 a fact which is inconsistent with burning, however slight. At Vaphio, on the other hand, owing perhaps to the nature of the soil, the body had evaporated without leaving a trace behind; but the place where it had been was indicated by the position of the weapons and ornaments buried with the defunct.4 Finally, Crete has given us a number of specimens of terra-cotta vats, with elegant designs, the dimensions of which approach those of sepulchral urns, into which elsewhere, in Etruria for example,

¹ See ante, pp. 385-388.

² Athenische Mittheilungen, 1880. Tsoundas formerly states having lighted on none but liliputian hearths in the numerous tombs which he opened at Mycenæ, and they naturally occupied a very small space only in the chamber. In the minute pieces of charcoal scattered all over the floor, he thinks he made out chips of resinous wood, such as pine, which the peasantry still use at the present day by way of candles to light their houses.

³ A tomb of the same period, resting on the rock, to the south-eastward of the Athenian acropolis, has also furnished a skeleton.

⁴ Das Kuppelgrab.

was deposited the residuum from the pyre (Figs. 167, 245). At the time of their discovery they were full of bones, which bore no trace of fire.

That inhumation should have been the rule during the course of the Mycenian period is no more than could have been expected from the ancestors of the Homeric Greeks. Interment agrees far better than burning with the first simple conceptions of man relating to a life beyond the grave.\(^1\) The funereal rite in question was never abandoned by the Egyptians, whose ideas in this direction were rigorously pushed to their extreme consequences, and over whom they held so firm and abiding a sway.\(^2\) As de Coulanges has forcibly shown, the sepulchral rites of

FIG. 245.—Crete. Clay vat. Height, o m., 48; width near the rim, 1 m., 105.

historic Greece and the laws which governed her cities, are wholly opposed to cremation practices, which allow nothing to remain of the body except a handful of ashes.³ The beliefs which many a detail in these rites, many a provision made by the laws for peculiar manners and customs, seem to imply, are in unison with the same order of ideas which were prevalent in Egypt. At the bottom of the grave, into which wine libations and sacrificial fat are poured, we feel the mysterious presence of a being who continues, in ill-defined conditions, an existence resembling that which he led beneath the light of the sun. It

¹ ORSI, Urne funebri Cretesi.

² See our analysis of the ideas under consideration in History of Art.

³ DE COULANGES, La cité antique.

is a person who eats and drinks, and enjoys the possession of riches buried with him in his eternal abode; one who is accessible to joy and sorrow, to gratitude and anger, interested, too, in the movement and stir of this world, where he intervenes to reward pious children who honour his memory, and chastise those that are forgetful of him. The strange persistency of such conceptions proves that they held supreme sway during those long centuries which correspond to the infancy of the Hellenic race; they sank so deeply into these fresh minds, that the advance of speculative thought was unable to eradicate them. Hence it is that in the day of Plato and Aristotle, we find Isæus appealing to them with telling effect upon an Athenian jury.¹

Inhumation is the only mode of disposing of the body which does not rudely shake the belief in the existence of a netherworld, consequently it was the only one that was in practice where this same belief was dominant. Vision, nay, even hallucination cannot dispense with a modicum of reality to start with. This element, without which self-illusion could not be carried on, was supplied by the last impression left by the departed, ere he was lowered in the grave, surrounded by kinsmen and friends, when the lines of the face were as yet unchanged, and the features still preserved their natural contour. No great effort was required to conceive the human form keeping itself whole and lasting on for weeks, nay, months and even years, provided they abstained from following the destructive process which goes on silently in the darkness of the grave. They just as easily pictured to themselves the colour mounting to the pallid cheeks of the defunct, as he fed on the toothsome viands offered him, or seemed to watch his mouth, which had looked as if closed for all time, re-open and about to speak. However great may be the imaginative power in its first freshness, when it not only invents but keeps up the illusion in which it delights, it would not have been proof against the utter annihilation of the body on the funereal pyre. If, in despite of the change which ushered in the cremation system, this belief of a life continued in the grave still kept its ground, it is because it had been written in indelible characters in the innermost depths of thought when another mode of burial had prevailed. Had the order

¹ G. PERROT, L'éloquence politique et judiciaire à Athènes.

been inverted, it would never have gained so complete a mastery over the mind.¹

The furniture and arrangement of the Mycenian necropoles -taking the term in its broadest sense-are in perfect accord with prepossessions relating to a life prolonged in sepulchral Their logical outcome is the embalming process. the Mycenians were very timid in their attempts at mummifying, it is because they lacked the necessary ingredients, nitre, aromatic substances, and the like. But although their means were much simpler, they neglected nothing, as far as we can see, of what seemed to secure the preservation of the body for a considerable time. We have laid stress on the mode of construction and closing of the shaft-graves.2 Dwarf walls were built between the body and the native rock, and in the chamber was laid a solid thick pavement (Fig. 109). The entrance to all subsequent domed- or rock-cut graves was closed either by a cumbersome unwieldy door, or a wall of dry stones. This was demolished and rebuilt after each burial, when the passage leading to the vault was also filled up with earth; with this difference, however, that in the bee-hive tombs of the lower city the body has been allotted more space than in the pitgraves, whether, as in the Treasury of Atreus, he has a chamber all to himself, or, as is usually the case, he rests under the cupola itself.

Let the dimensions and arrangement of the tombs be what they may, the horns and bones of bulls, of sheep, goats, and fallow deer, which have been picked up among the ashes and charcoal lying above and within the graves, bear witness to the ideas and sentiments which the mystery of death suggested to the men of that period. These remains can be no other than those of victims, whose flesh was consumed on braziers that stood either in the vault or the vestibule. That shell-fish formed no inconsiderable item in the diet of the inhabitants of Argolis, is

¹ This has been well grasped by ERWIN ROHDE, in his fine work, *Psyche*, one of the most suggestive books that has appeared for a long time in Germany. The author is equally at home in modern and ancient research; his interpretation of old texts by the light of the recent excavations is instinct with rare insight; he shows how wide was the difference between the conception referred to above, as revealed by the discoveries of Schliemann and his compeers, and those that were prevalent in Homer's time.

² History of Art.

shown by the quantity of oyster-shells, some of which had not been opened, discovered by Schliemann in one of the tombs, whilst olive berries were found in another. These offerings were not the outcome of obsequies alone. The deep layer of rubbish which surrounded the slab-circle, composed as it was of earth blackened by burnt matter, ashes, bones of animals, and wood in a carbonized condition, was not heaped there in a day or week. It proves the existence of rites which continued to be celebrated here in honour of the dead laid out in the depths of the rock. We have a further proof, if proof were needed, in the hollow altar found one metre above the fourth tomb (Figs. 102-104), and very similar to that seen in the court of the Tirynthian palace (Figs. 81, 82).

Then, too, we learn that the custom already existed in that remote age of breaking vases which had served in the sacrificial rites; whilst the hollow altar recalls the hole sunk by Odysseus with the point of his sword on the Cimmerian shore, into which he pours wine, honey mixed with water, porridge, and the black blood of victims, to the end that the world of shades (larvæ) may come and drink out of this spring of life.² In such vaults as were found undisturbed, fragments of a single vase had often been scattered, seemingly with design, to the four corners of the room; at other times, analogous but diminutive fragments had been sprinkled all over the skeleton.³ In either case we seem to follow the movement of the hand, which after breaking the fictile piece, sowed the bits on the ground, or, it would appear, over the burning embers of the brazier; for some of these scraps bear marks of fire.

The blood and fat of immolated victims, milch, wine, and honey were supposed to nourish and quench the thirst of the dead; to renew his ever-ebbing life each time such gifts were brought to them. Sacrifices of another kind are conjectured to have been offered to the dead, in that human bones have

¹ Schliemann, completely engrossed with the idea that the corpses had undergone cremation in the pits, paid no great heed to the remains in question, and failed to apprehend their real character. But Milchöfer, in some notes published in the *Athenische Mittheilungen*, after his visit to the field of excavations, drew attention to the enormous place sacrificial remains occupy in the detritus.

² Odvssev.

³ Das Kuppelgrab von Menidi. The same remark is made by Tsoundas upon bone and ivory objects.

often been picked up in the dromos by which the bee-hive graves at Mycenæ were entered. In one of these six skeletons were discovered, lying across the path, the one upon the other, along with other human bones and common pottery. What mean these skeletons? They are assuredly not members of the family for which the vault was excavated. Why were they left without the common chamber, huddled up in the passage, and crushed under the weight of the fillings? Are we to recognize in them poor relations, who were not allowed to share the same chamber as the tribal chief?

But in those primitive societies personal property had scarcely come into being, and inequalities of rank cannot have been very marked between the inhabitants of a small borough, whose members were all acquainted with each other. All those who could claim a common ancestor enjoyed the same rights, had the same duties to perform in the place of their birth. Should we, then, view these remains in the light of slaves who had no right to enter a tomb purposely built and adorned for their masters? We are met on the threshold by the following objection: both Athens and Rome made room in the family vault for a faithful slave-previously initiated and made participator in the rites of the domestic worship—in days when simplicity of primitive manners was already a matter of antiquity.1 Admitting that there was no such usage at Mycenæ, how are we to explain the fact of so many bodies having been found together in a tomb apparently undisturbed? We have another explanation to propose: may we not be confronted here by the remains of captives who, like the Trojan prisoners sacrificed to the manes of Patroclus by the son of Peleus, were slain upon the chief's grave?² If the Homeric tales describe human sacrifices which had fallen in desuetude in the ninth century B.C., it is because the remembrance of an epoch when the usage was general among the Hellenes, as it was among the Scythian tribes of Southern Russia, had not passed away.⁸ The rites observed at the royal funerals of the latter have been preserved to us

¹ See texts collected by DE Coulanges, La cité antique.

² In the human remains discovered at Mycenæ, amidst the soil and rubbish which covered the pit-graves of the slab-circle, the relics of human sacrifices have been recognized (MILCHÖFER, Athenische Mittheilungen; SCHLIEMANN, Mycenæ).

³ Achylles sacrificed twelve prisoners to his friend Patroclus (Iliad).

in a curious passage of Herodotus.1 If we find it hard to accept this hypothesis as probable, it is because the notion of a wholesale massacre is distasteful to our better nature. Nevertheless, there is nothing about these human sacrifices which is in disaccord with the general ideas which from other reasons we know to have prevailed here. The fact that the horses, wives, and domestic servants of the defunct were dispatched, like those of the Scythian king, to keep him company in the nether-world where he was supposed to carry on his existence, coincides with the impulse which prompted them to provide for his bodily wants, decking him out in his richest robes, and placing vases, arms, and ornaments within reach of his hand, together with clay idols which would procure him divine protection (Fig. 246). We have adverted to the unparalleled quantity of the precious metals contained in the oldest Mycenian cemetery. The grave furniture could not of course be everywhere as sumptuous; yet they strove, as much as in them lay, to surround the defunct with some of the best things which the house could furnish. There are very few graves which have not yielded glass and amber beads, ivory tablets, and golden leaflets, and above all pottery. This same idea ruled the external and internal decoration of the most important domed-tombs; it seemed natural and fitting to the men of that age that their chieftains should find no less luxury in their eternal abode than they had been accustomed to in their brief span of life.

These tombs were all family vaults, for all contained more than one skeleton; in most of them M. Tsoundas came upon as many as five or six bodies, which had been placed there at comparatively long intervals from each other. This is proved both from the number of the corpses and the situation they occupied on the floor. Such of the skeletons as were discovered in the middle of the room had apparently never been disturbed; but bone-heaps filled up the corners of the chamber. We have explained in another place how these heaps had been formed. Elsewhere a greater degree of reverence had been shown to these remains; such would be those that were discovered in the clay vats formerly deposited in Cretan tombs (Figs. 167, 168, 245). Such vats are much too small for adults; yet they cannot

¹ Herodotus. We have done no more than sum up Tsoundas' observations and arguments (Έφημερίς, 1888).

all have been designed for children, and must have served for what we would call secondary inhumations; that is to say, no sooner was the body reduced to the condition of dry bones, when it was removed from the place it had occupied in the chamber and placed in these recipients. A very similar custom prevails to this day in some districts in Brittany, the churches

Fig. 246.-Mycenæ. Terra-cotta figurine. Height, o m., 19.

of which contain chests filled with human remains. At other times, old bones were cleared out of the way by digging pits in the floor of the chamber, as at the Heræum, Palamidi (Figs. 130, 134-137), and in some of the Mycenian bee-hive graves (Figs. 122-124), or by sinking niches into the wall (Fig. 247); again, when the family was unusually numerous, pits and vats were simultaneously employed to get rid of all the bones (Figs. 125, 126); and again, here a second and carefully-planned chamber

was added (Fig. 127), there another was hastily run up on the spur of the moment, as is proved by the bad construction beheld in the traditional vault and passage, where all the lines are crooked (Fig. 128). The rebuildings and the precautions taken to provide a place for all the members of one family in the common family vault, speak in plain language as to the mode of burial that went on here for generations. The chamber and its contents were secured by a wall of loose stones against stray animals or malevolent persons. This wall was easily taken down and run up again with each successive burial. When, in despite of all possible additions to the original plan, the vault became chock-full of bones, it was permanently closed, and another was built as required hard by. In the lower city of Mycenæ are no isolated hypogæa; they always occur in groups (Fig. 88).

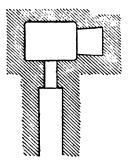


Fig. 247.-Mycenæ. Plan of rock-cut tomb.

Although, considered as a whole, they all belong to the same period, the single graves of any one cemetery cannot, of course, be all of one date. Here, iron, in the shape of rings-which is to seek in the upper necropolis-has been found in two of the tombs. Each family, then, was represented in the cemeteries in question by several graves, and each of these answered to a distinct phase in the life of the "gens." Here, too, as soon as a vault became full, it was walled up for good. has been conjectured that, like the vault, the passage leading to it was filled up and cleared after each burial, but we think on insufficient ground. The operation would by no means have been a light one, and might have recurred the following year or week. The dromos, by which the Treasury of Atreus is entered, is over thirty metres in length, and this distance is increased by ten and twelve metres for the passages of many of the bee-hive tombs at Mycenæ.

Apart from these objections, we have substantial proof that the entrance-passage was deliberately walled up for at least a series of years. M. Tsoundas noticed that, in front of the wall blocking up the entrance to the chamber, huge boulders had in every instance been piled up high, to remove which would have entailed great expenditure of time and labour; the more so that the blocking system narrows from bottom to top (Fig.

Fig. 248.-Mycenæ. Entrance to rock-excavated tomb.

248). The tomb could only be entered by clearing the dromos of the earth and rubbish filling it. This sometimes has acquired great compactness from having been rammed down hard, at Vaphio and the Treasury of Atreus for example. The passage of the latter was filled with virgin earth, and therefore undisturbed. If the chamber was accessible in the time of Pausanias,

¹ Upon the closing of the graves at Palamidi, see Lolling, Athenische Mittheilungen, 1880.

it is because after the fall of Mycenæ thieves, guided by local tradition, or a top-gap which may have disclosed the cupola underneath, opened a passage towards the upper portion of the doorway just large enough to let themselves through (Fig. 120).

Thus both rock-excavated graves and domed-tombs were permanently closed, by having their dromos filled up with earth and stones. The object of this was to secure the dead against unwelcome visitors. Every precaution was taken to prevent exciting the greed of later generations and their love of plunder; it was safer to count upon their ignorance than their pity. To this end they smoothed out the soil above the passages, reestablished the natural slope of the hill, where grass and shrubs soon grew up, and effaced all trace of the late works.

We do not think that there were two sets of tombs: (1) tombs in which every conceivable means were employed to keep the site secret, and (2) tombs where the high estate and importance of the defunct were proclaimed to the world at large by a stately portal and richly-decorated façade.1 The excavations carried on by MM. Stamakis and Tsoundas in the passage entrance of the two most sumptuously adorned cupola-tombs at Mycenæ (Fig. 88 and Pls. I., II.) have disclosed the fact that they were completely blocked up; accordingly, their fronts were not intended to be always visible.² As regards the majority of bee-hive graves, years must have intervened between the completion of the vault and the blocking-up of the corridor. To this universal rule there are apparently some exceptions, brought about, mayhap, by an epidemic, or accidents consequent on war, when the vault was filled at once with as many people as it could hold. This is the case with the tomb shown in Fig. 248 and Pl. XIII., where M. Tsoundas found traces of coloured stucco on the stones of the wall which blocked up the passage, as well as on pebbles which

¹ Dr. Adler, in his Preface to *Tirryns*, divides the tombs under consideration into two classes.

² Stamakis never published his excavation journal relative to Tomb I.; but he alludes to it in his account of the grave which he cleared near to the Heræum. Nor has Tsoundas given a report of his excavations of 1892, when Tomb II. was cleared. After describing the walls that blocked up the dromos at the two extremities, he concludes thus: "In my opinion, such facts certainly prove that the beautiful sepulchral façade, with its semi-columns and sculptured marbles, was intended to be exposed until and during the performance of the funeral; when, the dromos being wide open, the approach to the grave was closed by the 'stomion' door alone."

formed part of the filling; proving that when the earth was heaped against the façade, the plaster was still fresh and moist. This vault is regularly planned; here are no rebuildings, or niches pierced in the wall, or pits dug in the ground, or lateral chambers, as in many another tomb (Fig. 249). The construction, decoration, arrangement, and every detail about this grave show that they all formed part of the original plan; a fact which

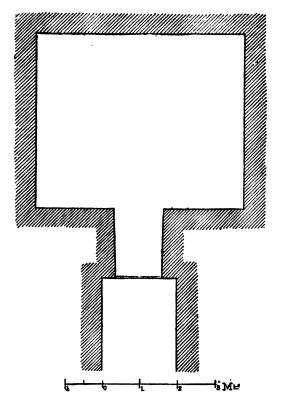


Fig. 249.—Mycenæ. Plan of rock-cut tomb.

favours the hypothesis by which we explain the exceptional spontaneity found here, relating to all the operations demanded by funereal rites. Were affairs managed after this fashion in buildings like the two great domed-tombs at Mycenæ, and the no less magnificent sepulchre at Orchomenos? Given the belief in an after life, the seal of which is perceptible on everything

¹ Tsoundas is inclined to think that a very similar arrangement existed in the domed-tombs.

here, no serious objection can be raised against the conjecture. If they stowed away priceless objects with the dead, it was not a bit more strange to execute, on purely artistic grounds, an architectural decoration fated to disappear from human gaze after the interment. Have not the Egyptians, under the influence of very similar beliefs, covered the walls of the royal tombs with marvellous series of bas-reliefs, cunningly hiding and obstructing their entrances with the landslips of the Libyan range? Nevertheless, there are two, or perhaps three, tombs here which have been provided with real doors, and not simply barred with planks. This is proved in the Treasury of Atreus by the holes pierced in the door-case for the pivot and the bolts, as well as the channel worn in the sill by the movement of the door to and fro.2

The same arrangement occurs in Tomb II.; and Tomb III. has no threshold, but a hole meant to receive a metal stem appears on the lower face of the pivot.4 The mode of closing which these dowel-holes reveal, shows that the doors were used for a certain time. Why and for how long did this provision last ere the chamber was made fast for all time? This is what we discern. Granted the importance which the people of that period attached to burial and its consequent arrangements, there is a prima facie presumption that the Mycenian kings, like the Pharaohs, began to build and adorn their own tomb in their lifetime, to make sure of having one to their liking. If their reign extended beyond the completion of the edifice, it could wait until they were ready for it. Meanwhile, the magnificent and highly-ornate façade would remain visible to all the world, and be a standing witness to the power of the chieftain who had had it built; the door, whilst helping the effect, would prevent intrusion and depredation. Did the death of the prince always put an end to this provisionary arrangement? We think not. We know that the bee-hive graves were family vaults, whilst in the cemetery of the Mycenian acropolis women's and children's bones have been found by the side of men's bones. If the cupola-tombs display a better order and greater sumptuousness, is it a reason why

¹ History of Art.

² Thiersch, in Athenische Mittheilungen.

³ ADLER, Preface to Tiryns.

⁴ Letter of M. Tsoundas, December 10, 1892.

they should have differed in this essential point from their fellows in the lower city? The ruler who had prepared for himself this ostentatious vault, would doubtless mark out beforehand a place in it for his wives, his children, and nearest kinsmen. There came a time, however, when the whole available space was filled up. Then, and only then, the tomb was closed for ever, the passage was filled up, and the façade buried out of sight with stones and imported earth; whilst the reigning sovereign built him a tomb hard by, where he and his would find their last dwelling-place, even as those of a former generation had done before him. Was the notion relating to this primitive mode of burial kept alive among the ancients-in despite of the change which had intervened in this direction—by discoveries made in these tombs by treasure-seekers, or was it tradition which kept green the memory of the primitive rite? To this question we can give no positive answer, except that the Hellenes pictured to themselves the pre-Homeric heroes as having been interred and not burnt. When, in the sixth and fifth century B.C., the Greek cities, on the advice of the Delphic oracle, looked about them for the remains of their founders, the possession of which was to secure triumph to their arms and the welfare of the State, what they removed within their walls, with great pomp and circumstance, were not ashes but skeletons, held to be those of men of unusually lofty stature.1 Again, the fact that an erudite poet, Apollonius of Rhodes, dared to conform in this matter with historical truth, in opposition to the revered authority of the Epics, is full of significance. In his Argonautica, the heroes who accompany Jason bury and do not burn their dead.2

Pit-Graves in the Mycenian Citadel.

Our description, in a former chapter, of the shaft-graves, when we surveyed the primitive culture of the Greek world,

¹ This is told both of Orestes and Protesilas (HERODOTUS); of Theseus (PLUTARCH, *Theseus*) and of Pelops (PAUSANIAS).

² APOLLONIUS, Argonautica.

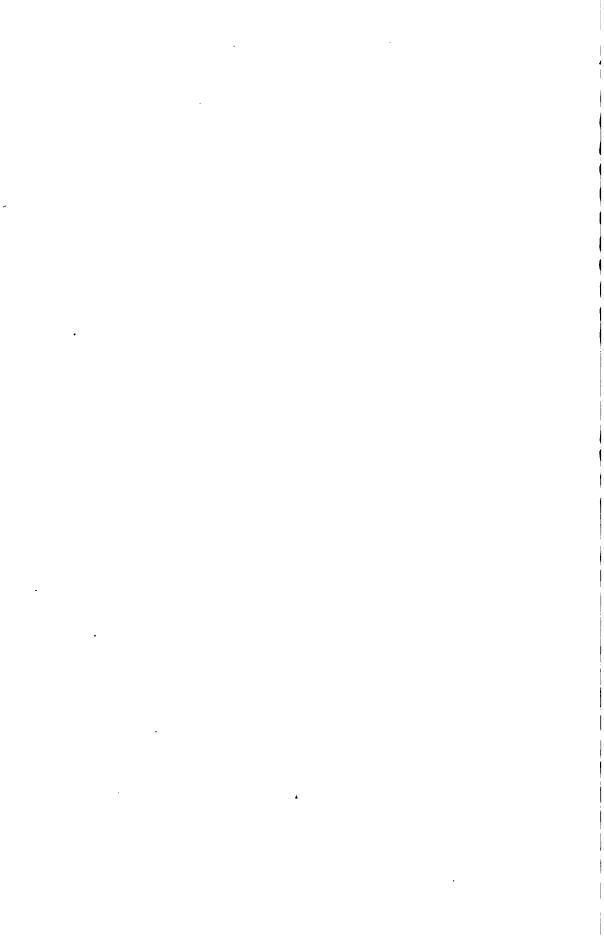
was sufficiently comprehensive to dispense us from entering into further details in this place in regard to them. Fig. 250, which we engrave below, will enable the reader to form a correct idea as to the aspect and situation of this remarkable group far more efficiently than any word-painting of ours. The restoration, based on the data furnished by C. Belger, is due to Lubke, and requires some few words of comment. This will give us an opportunity of defining with greater nicety the probable sequence in the gradual development of the group in question, during which it probably assumed the aspect in which we show it here.

The six graves, which contained the remains of fifteen bodies, are excavated at different levels on the side of the citadel hill facing west (Fig. 90, C, and Fig. 251). It is just possible that originally the several mounds, each surmounted by a stela, lay at some little distance from one another, but as their number increased, they got nearer and nearer, and ended in forming one continuous tumulus (τύμβος), which had to be supported to the westward by a semi-circular wall, to prevent the earth from gliding down the slope, notably during the rainy season. On stated days, and as the year came round, propitiatory sacrifices were offered above these tombs. In consequence of these ceremonies, the tumulus rose in height, and with it the sustaining wall, the rebuilding of which, however, was not carried out with any regard to symmetry, nor were they mindful to keep the stelæ in an erect position, for several, in a fragmentary state, have been found buried in the ruin and soil. Hence there came a day when the need was felt to invest a sanctuary which had been consecrated to the worship of distant and shadowy ancestors, with a form more appropriate to the holiness of the place. This was effected by means of a fence put around it. Was the sanctuary originally comprised within the citadel enclosure, or was it suffered to remain a long time without the rampart? Did the latter occupy the site of the present sustain-

¹ See ante, pp. 311-335.

² CHARLES BELGER, *Die Mykenische Lokalsage*, &c. An interesting paper by Reisch, entitled, *Schliemann's Ausgrabungen*, which appeared in the *Zeitschrift für Oesterreichische Gymnasien*, will repay perusal. It contains many a judicious and original observation; but we think the author is mistaken in identifying the bee-hive tombs of the lower city with the sepulchres shown to Pausanias as the burial-places of the Atridæ.

Fig. 250.—Sepulchral enclosure. Restored by Belger.



ing wall, which appears in the background of the perspective view (Fig. 250), and on our map 246,4 (Fig. 90), and seems as if it might be a prolongation of the left wall leading to the Lions Gate? It is hard to say. No traces have been noticed of a junction between the southern front of the fortress and the first wall, which ran along the inner edge of the western esplanade, covered with ruinous buildings, and which in after days was either totally or partly destroyed. On the other hand, it cannot be denied that the area behind the circle, but on a level with it, betrays marks of re-handlings; the boundary wall here sweeps round so as to enclose the additional space then given to the sacred precinct. Eastward, the sanctuary met the

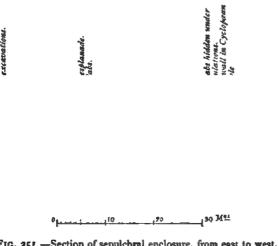


FIG. 25t.—Section of sepulchral enclosure, from east to west.

foundation wall of the second platform and the adjoining circuit; no free space, therefore, was left on this side, and it became necessary to provide circulation on the lower esplanade, to keep man and beast out of the holy ground. To this end they brought the rampart a little more forward, and contrived between it and the talus of the funereal mound a path for the inhabitants of this quarter. This is the path seen in Belger's restoration: it rises west of and near to the gate, and disappears between two impending walls.1 Whatever notion we may form of the primitive

¹ In Adler's opinion the tombs were situated without the acropolis, and the south face of the wall was then given its present direction to make room for the erection of the Lions Gate (Archaeologische Zeitung, and Preface to Tiryns). Steffen, on the contrary, thinks that the trace seen at this spot belongs to the original plan.

plan of the ramparts, it is clear that the city, at a given time of its long existence, executed this work in the fond belief that in so doing it would obtain the protection of the heroes interred within the mound, who could not fail to be touched by such tokens of regard shown to their memory. The western side of the precinct was brought to the general level of the sanctuary, whilst the wall was reconstructed and made more massive and higher. A glance at Fig. 90 will show that it passes above a corner of Graves V. and VI. The best-preserved stelæ were set up anew, and the sacred area was fenced off by a ring of slabs. We gather from Schliemann's imperfect account that the stelæ, many of which were standing at the time of their discovery, stood on the same level as the ring of slabs. The whole restoration, therefore, was carried on at once; the sanctuary was then placed on a footing which it preserved until the fall, and perhaps some time after the catastrophe which overtook Mycenæ, when stelæ and slabs alike were gradually covered with débris washed down from the upper platform. When did the alterations take place? We shall never know, except that it was before the introduction of letters on Grecian

The number of the stelæ is neither in accord with the number of the graves nor with that of the bodies found in them. Those who carried out the work confined themselves to setting up such of the plaques as were least injured. For the rest, they knew the lie of the graves hidden below, and had a certain notion of the contents of each. Thus, above Tombs V. and II., where, according to Schliemann, men's skeletons only were discovered, stood three stelæ with representations of hunting and war-scenes, which recalled the chieftain's active occupations and exploits. The second group of the left row contains two stelæ; the one quite plain, and the other embellished by a species of mæander (Fig. 252). This group corresponds with Tomb IV., in which were found bones belonging to both sexes. The eastern row of stelæ, standing nearly over Tombs I.

He allows, however, that when, on this point, the external face of the rampart was cased in polygonal slabs, rebuildings and a slight enlargement occurred, so as to provide a small space within the enclosure, between the circuit and the talus of the sacred precinct.

and III., are unsculptured; these tombs have therefore yielded but women's and children's bones.

The difference is easily accounted for: figured bas-reliefs, however roughly executed, involved an enormous effort from the inexperienced sculptor of that period, and could not be undertaken for the sake of women and children, who had contributed nothing towards the general welfare of the tribe, and whose chief claim to be remembered was their having been associated with the master or father, as the case might be.

Fig. 252.—Sepulchral stela.

The pit-graves are all grouped on the west side of the precinct (Fig. 90), of which they take up the half, and though roughly arranged in two parallel lines, they are neither on the same axis nor of uniform size. Over them stood, as already remarked, two rows of stelæ, of four and five single slabs respectively. The position of the cippi approximately coincides with that of the pits. Four out of the nine stelæ are sculptured on the side facing west. The orientation of the graves, as well as that of the bodies, seems to have been determined by the configuration of the ground; hence great variety prevails in this

¹ See passages cited by Belger, Mycena.

respect. Are we to attribute to a whim on the workman's part the fact that the stelæ—instead of being opposite to the main entrance, as might have been expected—are all turned to the west? Did it not rather proceed from a notion which prevailed here, as it did in Egypt, of a supposed relation existing between the sombre abode which man would inhabit after breathing his last, and the region in the heavens where each evening the sun, after passing through the zenith on his course, slowly sank, and had its fires extinguished in the sea, or disappeared behind a thick curtain of bluish mountains?

If the draughtsman has left out Cyclopæan constructions which lie between the Lions Gate and the slab-circle—duly set down on our map—it is because when he made his perspective view, the buildings in question were as yet uncovered. It is Steffen's opinion, as well as that of other investigators, that the second construction of the Lions Gate and of the sanctuary were simultaneously planned. It is also possible that the enclosure was made to serve a double purpose, namely, a spot where sacrifices could be offered, and also a place of assembly or agora, where the inhabitants of the citadel, the elders of the tribe (δημογέροντες), would gather together for council or judgment under the presidency of the king; whilst hard by stood the graves from whose depths they might seem to hear the voices of their ancestors speaking and suggesting wise decisions.

Throughout the classic age, several Greek cities had, or thought they had, the heroes whom they especially honoured, buried in their agora.² As long as matters in this direction remained unchanged, free access was doubtless had to the sanctuary through the northern and southern passages; these had not been enlarged that they might be immediately closed, nor had the slabs been furbished up to be masked by a brick or stone curtain. In the course of time, however, when the settlers, by reason of the security afforded them, waxed exceedingly, the business and movement of life migrated from the upper to the lower city. A new dynasty had arisen, which buried there its kings. It had no more difficulty in finding a space for the

¹ For the like practices see *History of Art*.

² See texts collected by SCHLIEMANN, Mycenæ. To his list of names may be added that of Hesiod, buried in the agora at Orchomenos; see ante, Vol. I. p. 422, n. 1.

dispatch of public business, at once more spacious and nearer to the vast majority of the citizens than its predecessors had experienced in the upper city. Then, for the first time, the acropolis became inconveniently crowded; space was not only scanty, but on account of its uneven surface very inappropriate for building purposes. The free plot of ground was eagerly pounced upon, and presently covered with habitations; much after the fashion which caused our cathedrals in the old days to be surrounded by wretched hovels and shops. The new dwellings filled up every inch of ground, and leant on one side against the inner face of the circuit-wall, and on the other against the talus of the sacred enclosure. From that day, the only unbuilt part was towards the north-east, where stood the palace gate, to which probably led the ramp rising on the western side of the hill. It is represented in the background of our perspective view by a gap in the middle of the wall.

The other entrance in the north wall is the Lions Gate. It stands in the left corner of our picture, and gives a back view of the triangular block upon which is carved the celebrated relief. In the centre of the circle occurs a swelling, produced by an enormous boulder which Schliemann found deeply embedded in the soil, but slightly protruding above the surface.1 Did it belong to the original plan? Was it a rustic platform, a "bema," whence the orator harangued the multitude gathered here? We know not. As will be observed, there occurs a considerable gap in the circle towards the south; this was brought about by landslips which destroyed a certain number of the slabs, or about a third of the total circumference. The question may be asked whether a gate facing the entrance did not stand here? In regard to the horizontal slabs placed on the vertical ones (Fig. 100), they have been purposely left out, in order that the reader might have a better view of the peculiar arrangement of this enclosure; had they been retained, they would have conveyed the false impression of a solid wall.

Although the esplanade and stelæ do not belong to the oldest period in the existence of the Mycenian people, the graves and their contents, which the excavators found undisturbed in 1876, are among the oldest instances we possess of that remote age. Mycenian civilization could already look back

¹ SCHLIEMANN, Mycence.

upon a long past when it buried the riches we have found in these pits; yet the discoveries made here will not enable us to penetrate beyond the period to which these graves correspond. Their very situation in the acropolis is a strong point in favour of their high antiquity. For a long time, people at Mycenæ, as everywhere else, only felt secure behind massive walls running atop the abrupt sides of a lofty hill. At no period of its existence could the enclosure of the lower city challenge comparison with the citadel rampart. If both the living and the dead descended from their rugged height, it is because a long series of victories, by placing the power of the Mycenian rulers above fear from hostile attacks, had ensured the tranquillity of their subjects.

The same conclusion is reached when we inspect the tombs at close quarters. A pit or hole excavated in the rock is the simplest and consequently the oldest mode of interment. In despite of the additional side-walls and closing slabs which we find here, the shaft-graves are older than the domed-sepulchres, whose construction involved far greater technical skill. As regards the rock-cut tombs of the lower city, with their dromos and more or less spacious chamber, they can only be considered as imitations of the cupola-buildings.

All this is of course mere presumption; more decisive and important evidence is supplied by the furniture. The objects composing it have a very archaic physiognomy, as against those that have been found either in the rock-cut graves of the lower city, or at Nauplia, or wherever they have not been disturbed and relieved of their contents, as at Mycenæ. The pottery is not rude and monochrome, like that of the early settlements at Troy and Tiryns; but reveals the incipient efforts made by the potter to decorate his clay (Pl. XX.). Earthenware of this kind has only been brought out from the Mycenian tombs on the acropolis and the deepest strata of the hill; nothing approaching it has come from Nauplia, Spata, Menidi, or Ialysos. The style of the sculptures seen on the stelæ is quite barbarous, and betrays an art which is far less advanced than that which modelled the lions over the gate.

But what is still more significant, is the fact that no trace has been discovered in these tombs of the peculiar characteristics

¹ Mykenische Vasen.

by which the end of the Mycenian period, the transition period, is distinguished. That the process of soldering gold upon gold was freely employed about this time, is evidenced by a number of fine gold leaves collected both in the tomb at the Heræum, in front of the Treasury of Atreus, and at Spata, together with quantities of glass beads, doubtless from bracelets and necklaces. On the other hand, the ornaments yielded by the citadel-graves are not soldered, and no glass beads have been found among them. A considerable advance in metal and glass work was made, then, between the closing of the pit-graves and the invention of new sepulchral types. In the former fibulæ are not found, but they crop up in the vaults of the lower city (Fig. 253); where, too, iron—that surest sign of the approach of the classic age—is not very unfrequent. Schliemann was correct in identifying the graves enclosed within the ring of slabs with



Fig. 253.—Bronze fibula.

those of a royal race. The habit of burying treasures with a defunct king has never been out of fashion among barbarians. The testimony of Herodotus in this respect has been brilliantly confirmed by the results of excavations in Southern Russia, where the custom under notice was as firmly implanted as among the Goths, with whom it was found as late as the fourth century of our era. We read that when their King Alaric died in Italy, the flow of the Busento was turned aside, a pit was dug in its bed, and the mortal remains were deposited there with many costly objects; and, that the site should ever remain secret, the slaves who had done the work were slain on the spot.² A glance at the stupendous works carried on here to ensure the

¹ The observation is due to Stamakis. Schliemann mentions soldering but once, and that in a very vague sort of fashion (*Mycence*), for the sake, as it were, of inserting Landerer's communication upon the use of borax by the ancients for soldering. The statement of Stamakis is much more positive. Schliemann also noticed the rare occurrence of glass in the tombs on the acropolis.

² JORDANIS, Getica.

end they had in view, must dispel any lingering doubt on this head. Would they have laid so heavy a burden upon themselves, had they been unaware that beneath the mound covering the pit-graves reposed the founders of the superimpending and redoubtable fortress, or at any rate of such of their successors whose prowess had assured the hegemony of Argolis to the warriors entrenched behind the walls? The stelæ were not put up without due consideration to the sex and quality of the dead above whose graves they rose. Uninterrupted tradition must still have kept alive in those days the names of the personages to whom they paid their regards.

What we divine of the history of Mycenæ, during the centuries which followed on the restoration of the sanctuary, is the reign of the Pelopidæ, whose deeds and opulence find ample recognition in the Epos. Naturally, in an illiterate age written documents could not make good deficiency of memory; hence is explained why the new-comers, by their brilliant exploits and conquests, caused their predecessors to fall in the background and soon to be forgotten. They came in, therefore, for everything that appealed to the eye; they were credited with the erection of all the monuments of the glorious past of Mycenæ. These appeared all the more stately by contrast with the poor condition of the place, which the Dorian conquest and the growing power of Argos had wrought. When and how the substitution of names occurred it is impossible to say; we cannot, however, accept the denominations which Pausanias has handed down to us, except as a laboured, ingenious, and arbitrary interpretation. It is well known that in his day nine stelæ were still in position on the esplanade, and that to account for their presence there they turned to the legendary circle of the Atridæ, of which several versions were then current in the Hellenic world. There was no great difficulty in finding what was wanted, viz. the nine personages to whom the cippi could be attributed; accordingly, they trotted out Atreus, Agamemnon, Cassandra and her twin babes, the charioteer Eurymedon, Electra and her two boys. The tale was complete, and additional evidence was discovered in the fact that outside the circle, but hard by, stood two separate cippi. To whom but to Clytemnestra and Ægisthus could these be assigned, whose crime had made them unworthy to lie in holy ground?

Did the Mycenians themselves invent that specious tale, or was it due to one or another of those precursors of Herodotus who, towards the end of the sixth century B.C., began to inquire into the antiquities of their nation, and to this end visited the several provinces of Hellas? It matters little; but whoever first put forward these names was unconscious of what the excavations have revealed to us, namely, that the number of the bodies contained in the graves was at least seventeen,1 and thus exceeds that of the superimposed stelæ; and that said stelæ fall short of their original number.² It would, then, be sheer loss of time to inquire how the victims of a successful treason could have been interred with all their riches; the designations picked up by Pausanias must therefore fall to the ground as void of historical truth. The secret which the defective memory of the people suffered then to be lost, will ever remain a mystery to us. Yet the probabilities are in favour of the hypothesis, according to which the pit-graves would date from the beginnings of the kingdom; that is to say, they would mount back to the Perseidæ of whom Greek myth said that they had been the first to cast a wall around the Mycenian rock.

General Characteristics of the Domed-Tombs.

Whilst indicating our reasons for heading, chronologically at least, our list of funereal monuments with the pit-graves, we have thereby marked beforehand the place of the cupola-tombs. The situation they occupy in the lower city at Mycenæ and elsewhere, whether in the plain or on the mountain slopes, where they are unfenced by walls, and for other reasons which it is unnecessary to repeat here, prove that they belong to the ripe age of Mycenian civilization, and that ancient local chiefs were buried in them.

¹ Schliemann came upon fifteen corpses; and two male skeletons were found in Tomb VI.

² Schliemann adverts to "a quantity of fragments of sepulchral stelæ" (Mycenæ).

The two principal tombs at Mycenæ, as well as the Treasury of Minyas, imply the co-operation of numerous and skilful hands engaged upon the work, which a prince alone could command, in order to satisfactorily carry through such enterprises as these, with their lavish display of bronze and gold; a monarch alone could exact from press-gangs the needful effort for setting in place enormous lintels such as those of the Treasury of Atreus. The furniture of these graves, as a rule, has not come down to us; but the little that has been saved is suggestive of wealth which, in the social state of that early date—as reflected in the Homeric tales—was hardly to be found except with tribal chiefs. The precious metals are not rare at Menidi or Spata, and a great quantity of ivory has been picked up there. Ivory must then have been an expensive material; out of it were made small costly objects. Besides the treasure said to have been brought out of one of the great tombs at Mycenæ by Veli Pasha, M. Tsoundas discovered, in a very similar sepulchre, ornaments, engraved stones, and two goblets, in which the Mycenian goldsmith has surpassed himself. If a single second-class grave has yielded so rich a booty, what unparalleled riches must not the great tombs at Mycenæ and Orchomenos have contained ere they were relieved of their contents! Tradition, moreover, connected the buildings in question, whether in Argolis or Bœotia, with the ancient kings of the country; and in so far as it applies to the sepulchral domes, it is perhaps entitled to more respect than when it pretended to know the names of the dead interred beneath the stelæ composing the circle. The cupolas wherein it recognized the treasuries of the Atridæ and Minyæ did not go back to so remote a period as the mysterious pit-graves on the acropolis. The men that erected them were nearer to the classic age; and the reigning princes of Mycenæ, at the time of the Dorian invasion, may have been the descendants of those who had built them these The proportions, style of construction, and more or less elaborate ornamentation of a given tomb varied according to the power and wealth of the chief for whom it was prepared; but whatever its importance and massive grandeur, the same methods prevailed in all.1

The site of the future tomb was selected either in the plain,

¹ R. Bohn, Ueber die technische Herstellung der Tholos bei Menidi.

or oftener on rising ground, in the mass of a hill of no great height. A deep circular pit was first sunk, of the required dimensions; these allowed for the thickness of the wall with which the future sepulchral chamber would be surrounded, but whose underground dome would be completely buried out of sight. An exit was cut through the rock at some point of the circumference, and when the tomb was excavated in the flank of a hill, the cutting or corridor debouched on the nearest slope. Into this open passage were thrown the earth and rubbish displaced in the course of the work. As soon as this was completed, the corridor was cleared and used as entrance to the chamber. The circular excavation was carefully levelled out, to form a resisting surface for the first course; and that it should be a firm support for the superimposed beds, larger blocks were used. It may also have been deeper. To verify the truth of this, it were necessary to clear the foot of the wall; but this as yet has not been done by any of the excavators. Above this first bed was put another, and then another, until the summit was reached; the rings became smaller and proportionately less in height as they rose upwards. Without, the displaced earth and rubbish were heaped up on and around the dome, and made to mount up with the construction. The workmen were thus enabled to use this species of breastwork as scaffolding, and to circulate around at their ease and in perfect security. In this way the last course, formed of a single stone, horizontally placed on the last ring of masonry, was attained. When the tomb was built on flat ground, the movable earth was apt to glide and be washed away by torrential rains. To maintain it in place, a sustaining wall was cast around the base of the artificial mound, remains of which have been found near to several structures.1 To the same end a transverse wall was set up at either end of the passage as soon as it was filled, to prevent the earth from getting into the chamber (Fig. 131), or spreading outside (Fig. 130, y, and Pl. III.). Now and again the approach was blocked up at once, at the Heræum and Spata for instance, where the corridor has a marked inward slope (Fig. 144).2 Without these precautionary measures, the circular chamber would have been flooded

¹ At Menidi, for example, in the tomb near to the Heræum, and Tomb II. at Mycenæ, as well as at Arkinæ.

² Athenische Mittheilungen.

after every storm of rain.¹ The dromos was more particularly exposed to ravages of this nature, for its pavement, as a rule, is no more than natural earth; but in the chamber a concrete floor, composed of beaten clay mixed with pebbles, has generally been laid down,² which in places still preserves bits of colour.³ The construction of the tomb, then, is like that of the domestic abode, for the same processes have been employed in both. Thus, coatings of stucco which sometimes cover the inner walls of the habitation re-appear in the sepulchral chamber and near its entrance, where they served to conceal the joints of the masonry.

One of the chief characteristics of these buildings is the arrangement seen everywhere above the door. The openings were purposely made remarkably high and proportionally broad, to facilitate the transport of the body and the movement of funereal processions. They required huge lintels, but these, in consequence of their great length, were apt to break in the middle under the weight of the upper portion of the wall. To lighten their burden, they contrived a triangular hollow, produced by corbelled courses of stone (Fig. 118). As far as the cavity was concerned, the end which the builder had in view was obtained; no stone beam has been found broken above it; but it had the defect of distributing the pressure unevenly, of throwing it on the beam ends, and at these points many of the lintels, notably that of Tomb II. at Mycenæ, have come to grief. Here the mischief extended below, and caused the fasciæ on either side of the doorway to grow apart; and but for the side pressure of the thick earth mattress the masonry would not have held together.

In working out his scheme, the Mycenian architect displayed less skill than his Egyptian colleague, who, in the pyramid of Cheops, calculated so well, that despite the enormous weight of the masonry over the sarcophagus chamber, not a stone has stirred, though the building has been standing thousands of years. The arrangement adopted by the builder for the tomb

¹ A different arrangement seems to have been adopted in Tomb II. There the dromos had a slight slope towards the outside, and was provided with a channel which ran along it and through its entrance to drain off rain-water, so as to prevent its accumulating in the excavation meant to form the floor of the chamber, whilst the construction was in progress.

² Athenische Mittheilungen.

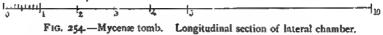
³ This is the case in the Mycenian domed-tomb marked III. on plan.

at Menidi comes very near to that which was so effectual in Egypt. Four great stone beams appear on its façade, between which are voids intended to relieve the lintel of the weight to be placed above it (Fig. 145). But we do not find here the two sloping slabs which meet to form a ridge-like roof, as in the pyramid, where they protect the discharging chambers, and help to throw part of the vertical pressure of the superstructure over the lateral parts of an admirably well jointed masonry. The slovenly and confused style of building at Menidi excludes all idea of a borrowing from Egypt. When the Achæans began to frequent the Nile valley, the pyramid of Cheops, together with its passages and vaults, had long been closed. The question has been raised whether Egyptian or Phænician builders may not have been employed by princes of archaic Greece. If it were so, we should surely find traces of that collaboration in the stately Mycenian sepulchres, rather than in the tomb of a petty Attic chief. But at Mycenæ, both architecture and the methods it employs are original, and do not betray the influence of foreign models. The resemblance which we have pointed out is the result of mere chance. builder of either country had the same problem to solve; one way out of the difficulty was perceived by both, but the Egyptian architect carried it out in a far more masterly fashion. employment of relieving voids was familiar to the Mycenian constructor. Thus, above the lateral vault at Orchomenos there apparently was a second chamber, whose walls were partly excavated in the living rock, and partly made of sun-dried brick.1 This cell had no direct communication with the vault or the outside, and was only put there to relieve the ceiling of the superincumbent weight of earth placed above it. Thanks to these wise precautions, the roof did not give way until quite recently; when, through fissures which in the course of time were brought about by the weather, the earth got into the void and put a burden upon the slabs contrary to the constructor's intention.

The two treasuries, that of Minyas at Orchomenos and of Atreus at Mycenæ (Tomb I.), are the only examples where a side-chamber occurs (Fig. 168 and Pl. III.). In both the second chamber, separated from the principal one by a narrow passage,

¹ SCHLIEMANN, Orchemenos.

stands on the right of the main entrance; but although they are alike in plan, there is yet a difference between them. Orchomenos the smaller chamber has been excavated at the bottom of a kind of shaft vertically sunk in the rocky hill, and in consequence of it had to be covered with huge schist slabs. The corresponding chamber at Mycenæ, on the other hand, is entirely rock-cut. The work here was carried out in different conditions. Before setting up the wall of the circular chamber, they hollowed out in the tufa enough space for a second apartment, and connected it with the main chamber by a corridor built



in the same style as the rest of the edifice (Fig. 254). The vault, like that of the Treasury of Minyas, is provided with a flat roof; but whilst at Orchomenos schistose slabs, carefully chiselled, lined the whole expanse of the surface, the only existing relics of the decoration at Mycenæ are two sectional low plinths, with so slight a salience as to have been overlooked by the draughtsman (Fig. 254). Again, the extreme simplicity, verging on rudeness, of the rocky walls excites our wonder; especially when compared with the stateliness and rare magnificence of the other parts of the building. The anomaly is more apparent than real. As in the pit-graves close by, and the chamber at Orchomenos, here also built walls were set up against the rocky ones. Constructed of rubble bonded in mud, they offered little resistance, and the staves and knives of visitors—shepherds and archæologists—may have brought about their destruction. Dr. Dörpfeld pointed out to me traces left at the angles of the entrance by the walls in question. Fragments of alabaster slabs, three to four centimetres thick, adorned by rosettes, which I saw in the museum at Charvati, may perhaps belong to the facing with which these rude walls could not dispense (Fig. 255). From identity of plan we may safely infer identity of destination for the side-chambers. But what manner of destination are we to suppose? The prevailing idea from the very first was to the effect that the lateral chamber had served as a sepulture.¹ When it was proved that the whole edifice was but a sepulchre, the principal hall was forthwith recognized as a Heræum. It is

Fig. 255.—Fragment of alabaster rosette.

plain, then, that when the resources of the Mycenian builder permitted him to give the tomb its full development, it consisted of two divisions, the grave strictly so called, and a roomy circular chamber, where all the objects which the defunct took with him were spread; here, too, were performed funereal sacrifices both on the day of the interment, and until the final closing of the sepulchre, and again on certain anniversaries.² M. Tsoundas does not share these views. His argument is this: Whenever rock-cut graves are provided with two chambers, human remains are found in both; why should there be a difference in regard to cupola-tombs? Nevertheless, given the difference of dimensions and aspect of the two sets of buildings, it seems natural to suppose that the difference also extended to the use to which

¹ Expédition de Morée.

² No bones have been found in the first chamber of the principal hypogeum. One is tempted, therefore, to consider it as a vestibule, a kind of chapel in which the ceremonies connected with the dead were performed.

the two chambers were put. As already remarked, M. Tsoundas noticed that when a grave was full to overflowing, old bones were gathered into heaps in the corners of the room. Buildings as important and spacious as the two treasuries must have been planned to receive all the members of a princely house; the constructor was bound to foresee and provide for future contingencies. Accordingly, the remains of the chief were deposited in the circular chamber which had been prepared for him, along with such members of his family as died soon after him. side apartment, on the other hand, served as an ossuary, where in the course of time the remains of the earliest occupiers were transferred, to clear the main hall. The smallness of the vault favours somewhat the hypothesis in question, for it would have been difficult to find in it room for all the nearest relations of the chief along with himself; on the other hand, there is nothing to prevent libations having been made here, as in the pit-graves, some metres above the bodies. The question which has been raised in regard to these two buildings cannot be decided, in the absence of the deposits which they once contained.

We have stated at full length, in another chapter, why domed-tombs were fated to be plundered at an early date. They attracted the attention much more than graves of the same era excavated in the flanks of a rocky hill, for which no great effort was required to completely obliterate the gap they formed on the mountain-side. Built in the plain, they were a conspicuous feature in the landscape; the smooth, regular slopes of the mound could not possibly be mistaken for natural undulations or broken ground; they seemed to be placed there for the very purpose of inviting cupidity; at the Heræum for instance, and Tomb II. at Mycenæ before the excavations. For although they were protected from intrusion by a thick covering of imported earth, and had their passage similarly blocked up, the "conical head" 1 of the dome, as Pausanias has it, was suffered almost in every instance to protrude above the surface. As if this were not enough, now and again the cupola carried a sign (σεμα) which served the twofold purpose of proclaiming to the people the site where its kings lay, and of exciting their reverence. In the rubbish filling the circular chamber at the Heræum, Stamakis found two slabs, with dowel-holes for the reception of clamps,

¹ PAUSANIAS.

which he thought had probably fallen from above when the roof gave in, and had formed a pedestal over the tomb, which supported some symbolic image, a stela mayhap, bearing some analogy to the cippi of the pit-graves at Mycenæ. And he refers to the very similar situation which sphinxes occupy over the most ancient Cypriote tombs; he might, with equal propriety, have recalled the remarkably archaic sphinxes which have been discovered in the Attic cemeteries of the seventh and sixth centuries B.C.

M. Tsoundas throws out the hint that this may be the case with the rock-cut graves. Barring the entrance to one of these were two stelæ, and internal evidence forbids him seeking here the place originally designed for them. One out of the pair is ornamented on its small sides and one of its faces (Fig. 229), and both are left rough below, as if meant to enter the ground. He conjectures that they were set up in the first instance either in front or above a grave; and subsequently re-used as building material, in closing one or other of the poorest tombs of the necropolis. We cannot admit, on the authority of a single example, that it was a common practice to set up stelæ of this nature at the approaches of the graves. It behoves us to wait for ampler evidence. If such a usage really existed, cippi were but temporary features, doomed to disappear as soon as the hypogæum was permanently closed. The rock-cut chambers we are considering would not have eluded our researches until the other day, had they continued, when closed, to hang out some sign to the curiosity of the casual visitor.

We now come to the question relating to the origin of a type of which we have described the principal varieties. Where did it come into existence? On this point archæologists have not been able to agree. Many of them derive domed-tombs from a conical hut, composed of unsquared timbers made to slope towards a common centre, thatched over, or covered with earth or skins. Such a hut, in fact, has been met with among a number of savages; who, to make it warmer in winter and cooler in summer, often sink it two or three metres deep. In that case, the walls are completely buried, and flush with the surrounding soil; a sloping passage, like the sepulchral dromos,

¹ Athenische Mittheilungen.

leads down to the subterranean house. This hut, according to the same authorities, was one of the varieties of the primitive dwelling of the prehistoric Greeks, perhaps even during the palmiest days of Mycenian civilization, when it was to be seen on many a point without the precincts of lofty acropoles and stately palaces. By the side of these were quadrangular houses, such as the excavations at Thera have revealed to us. have shown by many specimens, that wherever sepulchral architecture has assumed a certain degree of importance, the habitation of the dead is invariably found to be a more or less free copy of the domestic one. The stone-cutter of Lycia strove to reproduce the aspect and details of a wooden house on the fronts of his rocky sepulchres.1 Imitation here is not quite so literal; a wide gap parts the well-built circular chamber from the rude hut; nevertheless, this it was which, enframed in its circular pit, suggested the first notion of the monumental type under consideration.2 According to others, if the shape originated in the rudimentary house, the work of adaptation was not effected in Greece, but in Phrygia, where, says Vitruvius, subterranean buildings, approached by a long passage cut in the flank of a hill, had been in vogue from time immemorial.3 The passage from chambers hewn in the rock to built tombs was first accomplished in the Hermus valley, owing to the excellent quality and abundance of its bricks, and from Sipylus-Phrygia the domed or cupola-shape passed to Greece.4 Was it in reality, as is assumed, the quasi-subterranean house of Lycaonia, in which I halted many a time during the noonday heat, which furnished the architect the point of departure? Vitruvius is reticent as to the chamber having been circular and the roof dome-shaped in antiquity; to-day, the former is rectangular and the latter is flat.

Finally, brick-made tombs, which are assumed to have formed the point of transition between the Phrygian house and the sepulchral edifices we are discussing, have never been found in

¹ History of Art.

² TSOUNDAS, Oi προιστορικοὶ τάφοι της Ελλάδος; P. Orsi, Urne funebri Cretesi. Belger seems to think that the domed-tombs are but a later development of the hypogæum found at Palamidi and Mycenæ. We fail to grasp, however, how vaults of no particular shape can have grown into so sharply defined a form as the domed-tomb, conspicuous for skilful construction.

³ VITRUVIUS. ⁴ ADLER, Tiryns.

the Hermus basin. That the type was imported into Western Greece is not unlikely, and many indications seem to favour the hypothesis. Among the numerous specimens of buildings of this class, whether in Hellas, Laconia, or Thessaly, there is not one which betrays the effort of a first essayal, or the hand of a novice. Now, if the type had originated there, we ought to find tombs wherein some of the distinctive peculiarities we have enumerated had been left out, graves where the effort of an art which feels its way in a blundering sort of fashion towards new shapes would be apparent. But this is not the case. Of course, the graves are not all planned alike, but in all essentials they are practically identical; we everywhere recognize replicas of a type whose general lines had been fixed some time before.

This uniformity becomes as clear as day if we admit that the shape in question was invented, not at Mycenæ, but somewhere else, and was therefore already constituted when it began to spread in the Mycenian world, where it retained its distinctive characteristics. But now the burden is laid upon us to name a country and people whence the borrowing was made. the confused traditions relating to prehistoric times, that which is connected with the Pelopidæ stands out from among other cycles for its modicum of historical truth. The events which led warlike and wealthy chiefs to quit Sipylus-Phrygia, where their ancestors had obtained supremacy, are lost in obscurity. They are said to have traversed Northern Greece, and settled in Peloponnesus, where they obtained the lordship of Argolis The great part which the myth assigns to this and Laconia. royal race seems to point to a decisive advance in all matters pertaining to art and industry, which would correspond with their domiciliation in the peninsula. In a former volume we pointed out a necropolis which commands the Bournabat plain, near Smyrna—the reputed cradle-land of this race—where are beheld curious specimens of a sepulchral type of architecture, presenting singular analogies with the Mycenian domed-graves,1 with this difference: the sepulchres of Sipylus-Phrygia are not hidden in the flank of a hill; they are tumuli constructed with large and small stones; the chamber is always rectangular and small in proportion to the total mass of the building. On the other hand, the Smyrnian and the Mycenian vault alike consist

¹ History of Art.

of large blocks well jointed and dressed fair, set out in corbelled courses until the top is reached. If the vault of the so-called tumulus of Tantalus has no exit, one of the adjoining sepultures is approached by a passage, and though it does not extend outside the mound, it yet recalls the dromos of the Mycenian It is not impossible, therefore, that we have here the first stage of a type which, transferred by the Tantalidæ to the land of their adoption, was domiciled and developed there into the shape seen in the domed-graves of Hellas. However fascinating may be the juxtaposition, there is not much hope that the question of origin and transmission will ever be settled with certainty. This much is clear: our domed-tombs are distinct from the Asiatic specimens with which they have been compared, by marked and numerous peculiarities. Thus, the mounds, instead of rising cone-like on the spurs of some hill, are hidden in their flanks; they stand, therefore, mid-way between the tumulus and the hypogæum. The most intimate point of resemblance between the two sets of buildings is that all are constructed on a circular Finally, two at least of the Mycenian domed-sepulchres, and probably the corresponding edifice at Orchomenos, are given a frontispiece and a stately portal, in imitation of the palatial façade. Whether the Mycenian architect derived his inspiration from Phrygian models for the setting up of his cupolas, the façade is his own invention; nothing like it appears in the Tantalidian tomb or in the adjacent tumuli. To find aught approaching it, we must turn to the rock-excavated graves of Sangarius-Phrygia, and the similar buildings of Persia, where above and around the door the chisel has simulated, here a house front with a triangular loft, there the main porch of the palace.1 These tombs, whether in Magna-Phrygia or Persepolis, are all much younger than the Mycenian ones. Hence, in this partial resemblance we have one of those coincidences which are best accounted for by the very restricted number of combinations to which the materials employed lend themselves.2

¹ History of Art.

² It is curious to note how man repeats himself. In the Antiquarium at Edinburgh is deposited a plan of the sections and elevation of a tomb discovered in a mound near to Marshowe, the arrangement of which is within a little that of the Treasury of Atreus. Here as there, the vaulted or domed-chamber occupies the centre of the area, and is entered by a long covered passage akin to the dromos. Three other apartments open on the principal one.

No cupola-grave has been found either with an inscription or a style of furniture which will permit us to place it after the Mycenian period, when tombs assumed other shapes. The subterranean vault, however, apparently retained a certain hold on the popular imagination, even after it had fallen into desuetude; its remote antiquity on Grecian soil had much to do with the species of fascination which it exercised on the fancy. The tomb to be raised to the high-priest of Apollo and Helios, in Plato's ideal city, brings to mind the one we have passed in review; be it in the curvilinear shape of the roof, the circular base of the mound covering the vault, or the provision made in order that the sepulture may have sufficient space for a whole series of successive interments.¹

To account for the fact that throughout the classical period quaint sepultures were known to exist in those districts where primitive civilization had had its chief centres, a sufficient number must have been visible. Many have been destroyed, and the material re-used by the inhabitants; others are still concealed in the mountain mass; yet the number of those that are daily brought to light has been increasing for the last twenty years. As these papers were being prepared for the press, fifteen more domed-graves were announced. In the summer of 1892, M. Tsoundas uncovered another tomb between the entrance to the Mycenian citadel and grave No. 2 (Fig. 88), thus bringing up the total number to sixteen. This grave has not yet been excavated; the dromos, five metres seventy centimetres, is in part rock-hewn, and the rest built of small stones bonded in clay. The façade is the only portion which is constructed with large blocks dressed fair. Among these are not comprised the Spata and Anoja Messaritica specimens, for although they closely resemble our tombs, they are entirely rock-cut. During this

¹ Here is C. F. Hermann's translation of the passage (Teubner's collection). The correction we introduce has long been proposed as self-evident and necessary; the term πότιμος, "drinkable," applied to the stones, is void of sense. Plato wrote: λίθων πολυτίμων, "stones of great value." "Of the graves," he says, "the priests will have a long subterranean gallery, constructed with stones of excellent quality, upon which the passage of time will have no effect. The gallery will contain stone couches, set near each other. The dead having been duly placed in the chamber, a circular mound will be raised above it and a sacred wood planted around, to allow of the building being enlarged on this side, should fresh inmates require the addition to be made (Plato).

same campaign, M. Tsoundas lighted upon two other graves, marked 3 and 6 on our map; these, and the one discovered in 1892, have not yet been cleared. Researches in this direction, however, are not likely to be of much consequence. Up to the present hour, the domed-buildings, for reasons of plunder, have scarcely yielded anything. All we can hope is that by some lucky chance we may come upon unviolated pits, as at Vaphio. It is just possible that the vats in question were dug when the tomb had become full, to make room for late arrivals. was the case at Vaphio (Fig. 140), and also at the Heræum, where Stamakis thought that the pits were younger in date than the circular chamber.1 But the finds at Vaphio, which certainly belong to the Mycenian period, have proved that Stamakis was mistaken.² This is further strengthened by M. Tsoundas' recent discovery of two pits sunk within the area of the circular chamber of Tomb III., northward of the Lions Gate, and very similar to the shaft-graves of the acropolis. Like these, one out of the two troughs has an inner casing. The first, in length, averages five metres forty centimetres by one metre sixty centimetres, and three metres ten centimetres in depth; whilst the second is only two metres thirty centimetres long, eighty-three centimetres broad, and ninety centimetres deep. It consists of tufa slabs set up edge-wise at the sides, and others horizontally placed above to form the covering. This is another proof of the mingling of the two processes, a harking back to the primitive mode of sepulture for reasons of expediency, since they are found side by side with a well-constructed chamber. Notwithstanding the closing slabs, these troughs have kept their contents no better than the adjoining chambers. On the other hand, from a grave sunk in the dromos of Tomb II., five metres ten centimetres from the passage entrance, which M. Tsoundas found undisturbed, have come gold ornaments and two bronze mirrors, whose

¹ Bulletin de correspondance hellénique, 1891, contains a note relative to the exhuming of Tomb V., in the course of which some thin gold laminæ and a bronze knife were picked up. The excavation carried on at No. VII. yielded but a few potsherds, which came from the dromos.

² Athenische Mittheilungen, 1878. The fact that in these pits were found lamps of the Roman era, as proved by Furtwängler, who saw them on the spot, seems to favour his expressed opinion. But as the tomb remained open throughout antiquity, the vats, which had long been emptied of their primordial contents, may have been utilized at a comparatively modern epoch for fresh sepultures.

ivory handles had women's figures carved on them. That this pit is coeval with the main chamber, is proved by the style of these figures, for M. Tsoundas, a little later, found the handle of a mirror, which is almost a fac-simile of those from the rock-cut graves. The wealth of the furniture, like the dimensions and quality of the work, must have been widely different from one tomb to another. Thus, the diameter of the chamber of the Mycenian tomb (Fig. 88, No. 7, the door of which is reproduced in Fig. 119) is but eight metres twenty centimetres, and its dromos is a trifle over thirteen metres. The circular chamber of the Treasury of Atreus has a diameter of cir. thirteen metres, whilst its dromos reaches thirty-five metres. We know of what enormous size were the materials employed here, and how perfect was the workmanship. In the small Mycenæ tomb (Fig. 88, No. 7), the doorway of which is reproduced in Fig. 119, the diameter of the circular chamber is only eight metres twenty centimetres, whilst at the Treasury of Atreus we have a diameter of fifteen metres; here the dromos is thirty-five metres long, there it hardly exceeds seven metres. We remember the enormous dimensions of the materials used in Tomb I., whenever they were required for architectonic reasons, and what care was bestowed on the masonry; in other graves, on the contrary (No. 6), the vault is constructed with small, ill-jointed stones, like that at Menidi. Three or four blocks, juxtaposed to form the lintel, are invariably of great size, but they have no imitators; if tombs of good style exhibit stones cut with the utmost precision, what is seen elsewhere are no more than heavy masses of breccia left almost There are no reasons why we should classify in the rough. these tombs in chronological order, or that the worst built are necessarily the oldest. Good, excellent work, then, must rather have depended on the resources which the architect had to hand; thus, traces of metallic facings are only seen in the two treasuries. We incline to view those specimens as show slovenly and negligent construction as inferior copies of a type brought into fashion by the great domed-buildings of Mycenæ. it is that, despite many difficulties resulting from insufficiency of ground-plans and drawings, as well as the dispersion of some of the fragments, we have undertaken to restore Tomb I., the so-called Treasury of Atreus, so as to enable the reader to grasp the massiveness and noble grandeur which the Mycenian architect

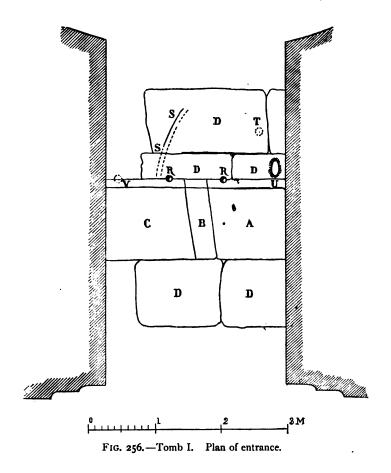
knew how to impart upon the royal tomb, when admirably served by ample resources, in the shape of trained artisans or materials of rare excellence, for carrying out his plans.

Description and Restoration of Tomb I.

As the traveller trends his way along the path winding up the eastern slope of the hill where is situated the so-called Treasury of Atreus, he is made aware of its importance by several signs. As if to prepare him for what is to follow, there is first a large level space in front of it (Pl. III.), twentyseven metres at the side, made up of earth taken from the dromos,1 which is supported by a wall still about two metres high, overlooking the deep ravine of the Chavos (Fig. 88, I.). Here and there the facing blocks, with imperfect joint, are preserved up to four or five courses; but the core, composed of rubble piled up anyhow, has given way and glided down into the ravine. Beyond the dromos the hill becomes very steep. The entrance passage was blocked up by a transverse wall, of which some stones are still in place. From this point the dromos rises to a gentle incline up to the tomb's entrance, a distance of thirty-five metres, between two parallel walls, six metres apart, which follow the natural slope of the hill. A concrete floor has been laid down in the alley. This is a sure sign of the special care which was bestowed on every part of the building, be it in the walls of the dromos, whose masonry

¹ In writing this chapter, we have made substantial borrowings from the oftcited account of F. Thiersch, published in Athenische Mittheilungen, 1879, under the title, Die Tholos des Atreus zu Mykenæ. His description is the only one which has been given of the building since the researches carried on there by Stamakis, who cleared the monument. His narrative contains many details on the style of building beheld here, such as an architect alone would be able to furnish. As remarked in a former note, it is regrettable that the author should have confined his investigations to the façade, and not extended them to the interior of the cupola, so as to examine the upper courses from a scaffolding. At the height where they occur, the eye from below cannot make out the details, even with the help of a fire lighted on the floor of the chamber. The light of the flame is lost ere reaching the summit.

is nearly as regular as that of the chamber, the huge blocks of the lower course, the three slabs of conglomerate which form the low sill of the circular building, the polished surface of which is hardly injured by time or wear (Fig. 256, A, B, C), or the soft calcareous flags of unequal size seen front and back of the threshold DD. The circular cavities shown at RR are probably dowel-holes, which served to fix a bronze band on to



the sill, or perhaps a sill of the same metal. ss represent traces supposed to be left on the flags by the door as it turned round u, which is the central point of the pivot. The couple of tiny punctated circles, T and v, are round holes sunk in the lower face of the colossal lintel. A larger cavity, already adverted to as appearing at u, doubtless played the part of socket. These cavities were certainly sealing-holes (Fig. 257). On each slab of the threshold there is a groove running between u and v; it

bears marks of bronze nails, two of which are still buried in the stone. Right and left of the doorway there is a row of sealing-holes, five centimetres broad by three centimetres deep (Fig. 257, PP, P'P'). The space between them corresponds with the width of the sill; some of these cavities also contain ancient

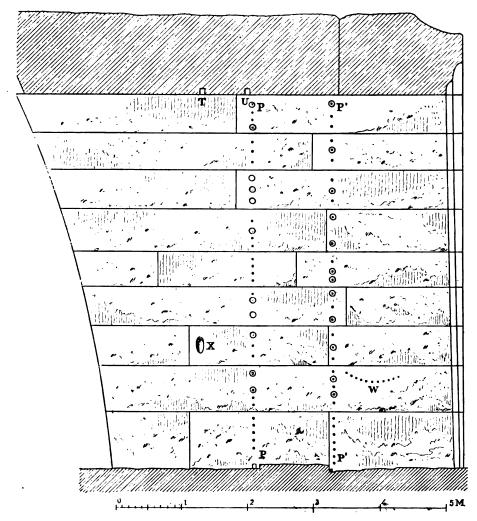


Fig. 257.—Tomb I. Elevation of entrance wall and section through lintel.

nails. Other and similar traces are seen at w. The line of nails represented by the letters PP is in the same vertical plane as the groove of the threshold; thus far extended the timber case, the "built" part enframing the doorway. Everything points to the existence of a bronze epidermis between

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Present state of façade. Elevation and section after Fr. Thiersch. Set up in position from existing pieces of casing.

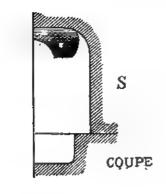
the lines PP, P'P'. The destination of the marks seen at w is unknown. At x (Fig. 257), on the corresponding point of the door-case opposite, are oval holes, analogous to those seen in the same situation on the Tirynthian and Mycenian gates; they were designed to receive the bolts which made fast the The opening is five metres forty centimetres high, by two metres sixty-six centimetres below, and two metres fortysix centimetres above. It is enframed by double fasciæ, and opens on a façade some twelve metres in height and six metres thirty centimetres in width, whose surface may be computed at seventy-five square metres. Our Pl. IV. is reproduced from Thiersch; to his ground-plan we have added, with their actual dimensions, such architectural fragments as have seemingly come from that section of the building. We shall have to account for the place which each piece occupies in the restoration; for the present the reader is asked to pass them by and direct his whole attention to what Thiersch carefully studied and noted down: a wall, pierced by many dowel-holes of varying size, with facing slabs which are not arranged in one plane, the upper courses being set back from the lower ones. Then, too, from the lintel to the penult course occurs a triangular space extending right through the wall. Other buildings of the same nature have taught us that this void was not a window meant to light the chamber, for this was always closed after the entombment, here by a triangular door, elsewhere by a wall of massive masonry, or a system of slabs. The conviction which forces itself upon the mind after a cursory glance at this façade, is that it was enriched by a casing of many plates, held together with bronze hooks, and carried liberally over wall and door. In order to determine the position which the decorator has assigned to the several elements, now scattered all over Europe, it will be well first to define the processes which he employed in putting the pieces together, and draw attention to such indications as are deducible from the state of the facing.

Metal plates were fixed to the wall with bronze clamps; pins of the same material, vertically set, served to join the sheets to one another. On the façade are six rows of dowel-holes, of six each: to these correspond numbers from 1 to 6, seen on the

¹ The triangular cavity of Tomb II., towards the chamber, still preserves its well-prepared casing slabs.

left of Pl. IV. Bronze clamps were dovetailed at both extremities; one end was driven into the stone, and the other into the bronze sheets (Fig. 258). Each hole shows a narrow rectangular cavity below, purposely made to facilitate the insertion of the dovetail. How the facing was applied to the wall, how the single units were joined together and fixed, is it

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PLAN

Fig. 258.—Tomb I. A sealing-hole.

not all shown in Fig. 259? The letters seen in it coincide with those which serve as reference in elevation and section, Pl. IV. The three courses above the lintel, as well as that resting on the relieving space, stand out beyond the plain wall. The bed, with the fourth row of clamps, projects seventeen centimetres from the one over it. The arrangement enables us to gain a notion of the receding field and the thickness of the facing

slabs, which were designed to cover the expanse of the surface and conceal the wall behind. The salience of the twin stones belonging to the course comprised between the figures 5 and 6, represented by v in the section, is even more marked. These corbelled slabs are the only two existing fragments of the decoration; their green colour and the polish of their surface singles them out from the rest of the structure. There are two rectangular holes below these slabs, and other two in the upper face of the abacus terminating the monolith capital (Fig. 200). Fig. 260 indicates how this capital and the corbel which it supported were

Fig. 259.—Tomb I. Showing arrangement of the lining slabs.

joined to each other and with the adjoining wall. The capitals are gone, but the position which they occupied is so well determined, that M. Thiersch did not hesitate to introduce one of the capitals in question in his sketch, entitled, *Present State*. We have followed his example. The bases of the semi-columns cleared by recent excavations are whole.

To return to the corbels. The very peculiar aspect presented by the course answering to the salient tabular slabs, and the two superincumbent ones, will be noticed. The three blocks are smaller than the rest, and form a narrow band on the frontispiece which was clearly meant to be masked by a special facing, with a salience above and beyond the whole length of the lintel. The dowel-holes found at the edge of the slab tell this tale very plainly (see Pl. IV., near letter v); they would be meaningless unless meant to receive clamps for fastening thick metal sheets whose projection was kept a

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Fig. 260.—Tomb I. The several members of the capital joined together.

trifle below that of the corbelled slab. If the general proportions of the edifice be considered, the front wall has certainly lost something, but not much, of its original height; several stones are missing from the course above the last line of clamps, and of another bed a single stone remains. There is

yet another detail in the aspect of the façade to which attention should be directed; namely, the small holes on the surface of the lintel, designed to receive nails (Pl. IV. x), and those bored in the upper corner of the second fascia enframing the bay (Pl. IV. y). They are very thickly set on the lintel, where they describe five elliptical segments; though more sparingly distributed around the portal, they served the same end.

Let us enter the circular chamber. The work-frame of the door, the *stomion* of Greek archæologists, is five metres ten centimetres deep. The shape and dimensions of the doorway, the weight of the two stone beams, the masonry, and the processes employed in the construction of these cupolas, whose finest example is found here, have previously been dealt with. It only remains to point out such peculiarities in the inner

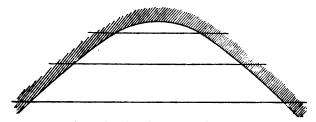


Fig. 261.—Tomb I. Top of cupola.

building, from which a plausible hypothesis may be formed as to its primordial decoration, of which we are bold enough to present a restoration. Its lowest diameter and its height are generally computed each at fifteen metres.² Thiersch, however, reckons its diameter at cir. fourteen metres twenty centimetres, and thirteen metres sixty centimetres in height or thereabouts. None of the dome's images, in section, which have hitherto been published, are strictly accurate (Pl. III.). The cupola does not form a broken arc, as might be supposed from the reduced drawings which have often been made of it. It describes a continuous, or rather three distinct curves, closed at the top by a single slab. The dome has always been examined in semidarkness; that is why the real character of this part of the edifice has escaped so attentive an observer as Thiersch himself (Fig. 261). Figs. 262 and 263 are from drawings made purposely for us by Dr. Dörpfeld; they very distinctly show how the

¹ See ante, Vol. I. p. 480.

sealing-holes, in some of which are still ancient bronze nails, were distributed on the inner surface of the dome. For obvious reasons, the holes in question had only been noticed on the courses near the ground. Dr. Dörpfeld ascertained that they extended much higher than had been thought at first, that they mounted in fact right up to the summit of the dome;



Fig. 262. - Tomb I. Portion of longitudinal section.

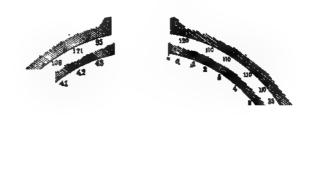
for although he could not distinguish them after the twentieth course even with the aid of an opera-glass, he counted six holes on the penult ring which is lighted from above.² As three of these fall in the field of our sketch, they are indi-

¹ See ante, Vol. I. pp. 468-469, 479-480.

² Thiersch only mentions those of the fifth and ninth course. But Dodwell and Leake noticed that they were more plainly seen towards the top of the cupola, where they ran less risk of being removed.

cated as distinctly as those below, whilst the thirteen invisible courses are more faintly punctated (Fig. 262).

The holes are of two kinds; they are double at the points of junction between the fourth and fifth course, and were intended to receive double-tailed hooks. Reference to Fig. 263, which represents, on plan, the fourth and eighth ring, shows that they are not equally spaced; the numbers coincide with the dowel-holes,



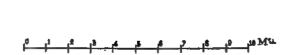


Fig. 263.-Tomb I. Plan of cupola at two different heights.

and express the intervals parting them. These vary from 35 to 124 centimetres. Above these courses the dowels are single and smaller, one centimetre across, and nine centimetres deep. In the eighth course, answering to the inner circle of Fig. 263, the spacing between the single holes—forty-three in number—is cir. one metre; the accompanying numbers are simply put there to facilitate calculation. Vertically, this irregularity is even greater. The holes do not coincide; but if we take three horizontal rows,

we shall find that the holes of the third line fall vertically over those of the first, whilst in the intervening second line the holes are in the centre of the space formed by the other lines. In this way a continuous lozenge-like pattern is obtained. Some of the rings—the sixth, tenth, thirteenth, and fifteenth—bear no traces of nails. Seen from the vaulted chamber, the door reproduces the arrangement of the principal gate (Fig. 264). Above the stone beam, three metres twenty-five centimetres long by fifty centimetres high, there is the discharging space. Small, serried holes, particularly visible right of the opening, indicate that a door-



case was fixed to the wall. The vault is approached by a corridor which traverses the whole block of the building; and its sides, as it ran inward with the stony mass, were faced by ashlar stones. Before these had disappeared, the passage in length was four metres sixty centimetres, and the rectangular chamber seven metres fifty centimetres on one side, and six metres sixty centimetres on the other, and about five metres in height. It has lost its decoration, which formed its chief interest, and made it resemble the vault at Orchomenos (Fig. 254). In the middle of the chamber, where bats have left marks of their presence, Schliemann found an almost circular depression, fifty-

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three centimetres deep, by one metre in breadth.1 These dimensions do not correspond with those that go to the making of a sepulchral shaft, such as that at Vaphio. Should we perchance seek here one of those offering-pits of which we have already found two specimens on our path? We think it most unlikely. The libation poured into these species of cesspools, both in the court of the Tirynthian palace and the pit-graves at Mycenæ, was sucked up by the earth; here an impervious rock would scarcely have lent itself to the absorption of liquids. Besides, Dr. Dörpfeld, who examined the chamber after it was cleared, is of opinion that said depression did not belong to the original plan, as Schliemann conjectured, and may very likely have been due to treasure-seekers. The traveller has no great wish to remain long in the side-chamber, whose worn walls are blackened by the smoke of fires lit by former visitors. He hastens back to the vaulted hall, which he is loth to leave; he lingers before a façade which, even in its decayed condition, retains a look of massive grandeur. In presence of this ruin, the archæologist, if he is not one easily discouraged by the prospect of protracted work, but for whom the difficulties of the problem are an additional stimulus, will not resist the temptation of re-establishing the missing parts of the edifice, and presenting it nearly as it must have been when the inhabitants of opulent Mycenæ contemplated it-for awhile at least, until the closing of the dromos -as a glorious symbol of the majesty of the Pelopid princes who reposed therein.

Up to the present time, Donaldson is the only archæologist who has attempted the restoration, in elevation, of this façade. His sketch, however—which has often been reproduced,—though brimful of happy suggestions, dates from a time when notions relating to Mycenian art were shadowy in the extreme.² The

¹ SCHLIEMANN, Mycenæ.

² The restoration referred to above may be seen in Pl. V. of the section devoted to Mycenæ, in Antiquities of Athens and other Places in Greece, Sicily, &c., by James Stuart and Nicholas Revett. Apart from certain improvements of detail, it reproduces the tentative restoration to be found among Elgin's drawings. The first step, therefore, in this direction was taken by the Sicilian architect Sebastian Ittar, who worked for Lord Elgin along with the Neapolitan landscape painter, Lusieri. The most picturesque of the views that have been published of the inner building is certainly that which Gell engraved. But the perspective is quite wrong (Itinerary of Greece). Superficially, Plates 66-69 of the Expédition de

building had not been completely cleared; its real condition was mere guesswork, and the existing perspective views, instead of helping, obscured our knowledge. Thus it was that Donaldson, unaware that the shaft tapered downwards, inverted the natural order of things, and set up a capital which, in point of fact, is the base. We are better off to-day, inasmuch as other similar sepultures, recently discovered, and a host of manufactured objects of the same period, suggest many a significant comparison. The halls and approaches to the tomb have been cleared down to the regular soil, and have uncovered details of the highest interest, the bases of the semi-columns, for instance, and other sculptured fragments. Finally, MM. Thiersch and Dörpfeld have made a careful and minute study of this tomb; the former has devoted his whole attention to the façade, the latter to the arrangements of the inner building. Both have noted down, one by one, the traces left by dowelholes; these afford technical and more or less distinct indications relative to the facings. Yet M. Thiersch, in 1879, wrote to the effect that "there are not sufficient data for a restoration; to attempt it would only result in the production of an entirely fanciful image, and pro tanto devoid of interest." 1 Dr. Adler's language, though less explicit, is no more encouraging.2 Undismayed by the adverse verdict of these two competent judges, we have dared to undertake a work which they deem impossible (Pl. V.). If, in despite of the fiasco said to await us, we have not given up the undertaking, it is because we hope that the method we have adopted will satisfy the severest criticism. The generous and timely help which we have received from all quarters has greatly facilitated our researches; it has enabled us to juxtapose photographs and drawings of all known fragments of the decoration, which we have utilized after having referred them to the surface to be filled, so as to ascertain where they would most fittingly come in. There was no possible hesitation

Morée look well; by juxtaposing them with those we reproduce, or even with photographs, it is at once seen how carelessly the drawings were executed from which the plates have been engraved. The traces of nails visible on lintel, door-frame, and cupola were indicated by Gell, if not with rigorous precision, quite near enough to attract attention to the detail; but in Ravoisié's plates they have completely evaporated.

¹ Die Tholos des Atreus.

² Tiryns.

about a certain number of the pieces, their situation being determined by their shape and dimension; so that the central part of the edifice may be restored with almost absolute certainty. For the framing and crowning members of the region near the triangular space the case is different. Here, either the ornament has disappeared without leaving a trace, or the piece of wall to which it was applied no longer exists. Nevertheless, gleanings may be made out of the condition of the wall, the presence of dowel-holes, and the arrangement of the stones. Besides our general knowledge of the habits of the Mycenian ornamentist, we are guided by practical observations of other very similar buildings, where what is mutilated or wanting in one place is found in better condition in another. Nobody will dispute our right to utilize the data furnished in this direction

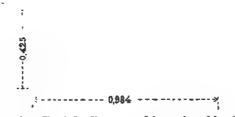


Fig. 265.-Tomb I. Fragment of decoration of façade.

by Tomb II.; its plan, structure, and design have much similarity to the Treasury of Atreus (Tomb I.), and its outward aspect was scarcely less rich.

Let us suppose all the fragments pieced together and spread out on the floor; in sorting them we shall find that some are scraps of bands (fasciæ), and were fixed, therefore, lengthwise in narrow strips, with a feeble salience over the field (Pl. IV. P. H. L. K. V); others are nearly square, and would come under the denomination of slabs (G). Bearing in mind the arrangement of the dowel-holes, it is plain that the facing must have been composed of a series of bands and slabs set flat, which formed a succession of superimposed zones. As the bands had to support the casing stones, they were given greater thickness, and firmly fastened to the wall with pins and clamps. 1, 2, 3, 4, 5, 6 represent the dowel-holes of said bands. Among the remains of these fasciæ are several pieces with the same design; but difference of scale precludes their being pieced together—

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the ornament is similar, but the size of the fragment on which it appears is dissimilar. We shall, then, have to find different places for different fragments. First of all, we must determine the position which these various items occupied in the façade.\(^1\) We will begin with the triangular void.

The fragment of red porphyry which was found in 1878 fits to a nicety the upper angle of the void under notice (Pl. IV. M). Carved on its surface are two rows of spirals. From this and

Fig. 266 -Tomb I. Fragment of decoration of façade.

another bit of porphyry, adorned in the same style, which assuredly belonged to the same unit, we learn the movement of the design (Fig. 265 and Pl. IV. N). One of the sides is cut obliquely, and must therefore have met the edge of the wall which adjoins the relieving space on the right. Hence we can only suppose that the bands were horizontally placed, and ran parallel to the ground. Another fragment of the same nature is given

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¹ We met M. Babin—who formed part of the Dieulafoy Mission—at Athens in 1890, when he was good enough to draw for us some of the fragments cited by us, which are preserved in the Central Museum and at Charvati.

below (Fig. 266 and Pl. IV. N). That all these pieces came from the same building is proved by similarity of material and design. In the same category should be placed the porphyry fragment which is preserved in the British Museum, with three rows of spirals (Fig. 267 and Pl. IV. N). The plan of the upper and lower borders, with sealing-holes, serves to show how these bands were joined to one another by means of vertical clamps. When pieced together, they constituted a species of screen, which closed the opening pierced above the lintel. As the thickness of these slabs was but nine centimetres or thereabouts, their collective weight was not great. As might have

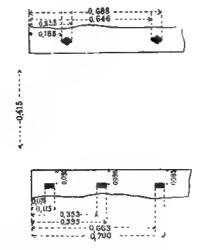


Fig. 267.-Tomb I. Fragment of decoration of façade. Elevation and Plan

been expected, the course of masonry, which was hidden by the facing whereon they rested, has disappeared. The screen is not in the same vertical plan as the field surrounding it. If the architect contrived an opening above all his domed-buildings, it was not likely that he would hide it away behind a facing which would merge into the rest of the façade; or make believe that he had put a solid where the rule of his craft required a void. We have no instance of any architecture, as yet uncorrupted by the over-refinements of decadent epochs, wherein ornament, far from disguising the great architectonic divisions, does not very plainly declare them. The closing of the circular chamber involved blocking up this great hollow with a stone curtain; but as this was drawn somewhat in the rear of the front wall, it

created a hollow which warned the spectator that there occurred a gap in the masonry. The triangular space required a border. We have supposed that the slabs adjoining it were adorned by spirals which formed a frame around the cavity. The portion of the frame which corresponds with the height of the bands was fixed by clamps or bedded in the slabs.

We have now to furnish the frontispiece, below and at either side of the discharging space. We start from slab c, of which a drawing was made by Lord Elgin's draughtsman (Fig. 268). It is the only fragment which will fill in one half of the space comprised between the rows of holes 2 and 3. Accordingly, we may

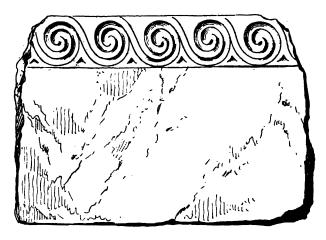


FIG. 268.—Tomb I. Fragment of decoration of façade. Height 0 m., 512. White marble.

safely infer that the façade was lined from right to left by two such slabs, set one above the other. Reference to our engraving (Fig. 268) shows that it was furnished above with a border of a single row of spirals; a corresponding line ran along the lower edge of the second slab, and the two formed a polished zone of about one metre in height, whose rich tint and almost plain surface were in pleasing contrast with the elaborate ornaments circling it. We are inclined to believe, with Dr. Adler, that painting is not unlikely to have aided the decoration of these façades. Have we not a curious instance of the intervention of the painter, and the taste with which he knew how to replace chiselling by ornaments drawn with red, yellow, and black figures,

Mycenian rock-cut graves? If what were its distinctive we prefer to leave but in our perution (Pl.

over the door-case of one of the Mycenian rock-cut graves? If a painted decoration existed here, what were its distinctive characteristics? As this is a moot point, we prefer to leave that part of the façade quite plain (Pl. V.); but in our perspective view, two running lions appear in that situation (Pl. VI.). There are evidences as to the great part played by the lion in Mycenian art, be it in the Lions Gate, on engraved stones, or jewellery. We might with equal propriety replace the royal beast by sphinxes or bulls. The space which occurs between the first and second line of the sealing-holes, above the polished zone, is less than the next immediately below, between

Fig. 269. - Tomb I. Fragment of decoration of façade. Red porphyry.

the third and fourth line. We may assume that there existed here an ornament which might be repeated vertically, as often as the decorator required it, and continued along the edge of the slab. Accordingly, we have applied above and below the border in question a single row of spirals, of which two fragments are in existence (Figs. 269, 270). The perspective view of slab (Fig. 270) brings out very distinctly its thickness. Judging from analogy, we have supposed that a very similar slab (Pl. IV. 4) covered the space represented by the first row of dowel-holes. The surfaces enclosed by these salient bands (1 and 2, 3 and 4) were lined with slabs, as thin as fragment G. They are gone, but the spaces they occupied have been rightly filled in with a form based on spirals, of the same family as that

which makes so brave a display of undulating and endless curvilinear lines on the ceiling at Orchomenos (Fig. 217).

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It is not conceivable that so sumptuous a façade should have been left without a crowning member which fulfilled the function of cornice. A cornice is to architecture what peroration is to a speech; it bounds and arrests the ascending lines of the edifice, exactly as in the speech the flow of ideas and the whole sequence of proofs cumulate towards the conclusion. Fragments R and P (Pl. IV.) are well suited to occupy

Fig. 270.-Tomb I. Fragment of decoration of façade. Lower portion. Height, o m., og.

this place, both from their size and the ornament they exhibit. On the one (Fig. 271) we have a row of spirals, and below, a line of discs, similar to those beheld on the pillar of the basrelief over the Lions Gate (Pl. XIV.). Below this, again, we have placed an ornament recalling the arrangement of triglyphs and metopes of the Doric frieze (Figs. 225, 226), and so much affected by the Mycenian ornamentist. The excavations of 1878 have brought out two specimens bearing this same pattern, though slightly modified and on a different scale. On account

¹ Represented in the upper portion of Fig. 270 are two other diminutive fragments of fascize decorated in the same style.

of the distance, the largest must necessarily be placed topmost in the façade. The two crowning members required no great salience. The towering side-walls and the mound at the back would carry off most of the rain-water, a minimum of which alone would fall on the frontispiece, and thus make a gutter

FIG. 271.—Tomb I. Fragment of the decoration of the façade. Height, 0 m., 46. Green breccia.

useless. We have yet to utilize the smaller of the twin bands, wherein triglyphs alternate with metopes (Fig. 273). The first idea that comes to the mind is to make it do duty as base to the triangle; for its well-furnished design will harmonize well

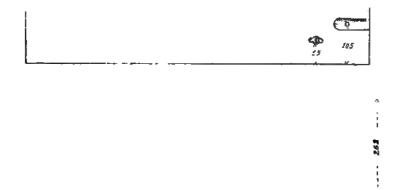


Fig. 272.—Tomb I. Fragment of the decoration of the façade. Height, 0 m., 262. Red porphyry.

with the prominent situation it is to occupy in the façade. Nothing can be urged against it; but, on the contrary, everything seems to counsel us to carry the ornament on the salient stones at either side of the triangle, so as to connect the latter with the adjoining surfaces, and establish by a frieze-like arrange-vol. II.

ment, a desirable symmetry between the upper and lower section of the edifice. The smaller scale of the lower frieze is made good to the eye by its proximity to the ground. That division of the façade decoration comprised between these two very similar bands had also to be provided with a lateral border, so as to bound it right and left, to form a transition between it and the double wall of the dromos. Without this necessary border, the arrangement would have savoured of clumsiness, for the patterns meeting at the edge of the wall would have looked as if abruptly interrupted, rather than as having come to their normal end. The borders seen on the ceiling at Orchomenos, and the mural paintings of the Tirynthian palace, prove how popular they were with the Mycenian ornamentist. The central division of the façade of Tomb II. is bounded on either side

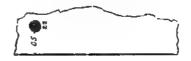


Fig. 273.—Tomb I. Fragment of façade casing. Elevation and plan. lleight, o m., 175. Red porphyry.

by a very salient mural band or pilaster (Fig. 118). pilaster-like strips must have been protected by a stone facing, whereon was painted or carved an ornament which rose with them towards the cornice. The doorway of Tomb I. bears no trace of having been flanked by this species of pilaster; but we have no reason to believe that they dispensed with a framing in that situation. In what style was the decoration of the case in question carried out? The buildings which we have passed in review prove that rosettes were largely employed as borders (Figs. 206, 213, 217, 218). The fact that one of the fragments from this very building exhibits a row of semi-rosettes favours the assumption that the artist who adorned this façade was no stranger to that form of enrichment. We are not sinning, then, against probabilities in setting up here a post, T, relieved with rosettes, like those which embellish the painted door-frame of a rock-cut tomb (Fig. 234). Should we not

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recognize a wall-band of this kind in the alabaster piece which is preserved in the Mycenæ Museum (Fig. 274)? The fragment is said to have come from the side-chamber of Tomb I.; but as long as the excavation diary of Stamakis remains unpublished, we may be pardoned if we attach little importance to information supplied by oral tradition. For the rest, the ornament is of a nature to suit equally well the lining of the façade and the rectangular chamber. The creamy white of the alabaster would have formed a charming contrast with the bands of red porphyry.

Fig. 274.—Tomb I. Alabaster fragments of decoration of façade. (The two pieces on the left.)

The upper portion of the tomb being now complete, there only remains to find space for fragment v, with semi-rosettes (Fig. 275). The band to which it belongs was the narrowest of all, and in no way corresponds with the sealing-holes of the façade; but it exactly coincides with the height of the slabs embedded above the abacus of the semi-columns. Let us put this band over the course of masonry which rests on the lintel, where it will be kept in place by its own weight, as well as by clamps and pins. The lower section of the front wall, below the lintel, was distinct from the rest of the frontispiece, from

its having no decoration. The facing, composed of beautiful courses of very hard calcareous blocks, with yellowish tones, was everywhere left exposed. Some few applied pieces of green breccia or metal were trenchantly relieved against the

Fig. 275. -Tomb I. White marble fragment of decoration of the façade. Height, o m., 16.

light colour of the limestone. Of these the most important are the two semi-columns at either side of the doorway, rising to a height, with base and capital, of six metres sixty centimetres. Although the base, composed of low steps, alone remains in

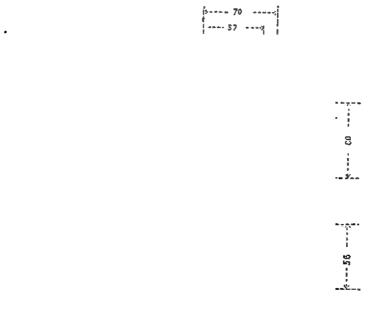


FIG. 276.—Tomb I. Green breccia fragment of capital.

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situ, we have none the less all the requisite elements for restoring the column. True, one of the capitals (Fig. 200, A) is very much worn, but it is nearly complete, and the general contour of the mass and main modulations of the shape can be plainly made out. The other capital has been taken to pieces and dis-

persed. Of these, one is at Mycenæ (Fig. 204, B), another at Carlsruhe (Fig. 276, c), and the smallest, which belongs to the Berlin Museum, is engraved under two aspects below (Fig. 277, D). It is the same with the shaft. A piece of it preserved in the British Museum appears in Fig. 278; another fragment has already been referred to (Fig. 203). Accordingly, we have the ornament in all its detail, for both capital and shaft; as to the height and outline of the column, they can be very easily defined.

The base has not stirred, and in the perpendicular line of this, above the lintel, on either side of the doorway, there still exists a flat, corbelled stone, on the lower face of which are sealing-holes. These correspond with the holes noticeable on the upper face of the least-injured capital (Fig. 200). The length

FIG. 277.—Tomb I. Green breccia fragment of capital. Length, o m., 27; width, o m., 205.

of the shaft strictly so called, exclusive of the capital, is comprised between the edge of the corbel and the base; and the dimension of this makes it plain that the shaft affected the shape of an inverted truncated cone, like that of the Lions Gate (Pl. XIV.).

On the testimony of several travellers, a large piece of this shaft was lying on the ground in front of the edifice at the commencement of the century. Drawings of it were made by Dodwell and Lord Elgin's artist; it is from the latter that we reproduce Fig. 279. In this fragment we recognize a portion of the shaft which came in contact with either the capital or the base, from the fillet bounding it at one end.

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¹ Gell, The Itinerary of Greece, 1810; DODWELL, A Classical and Topographical Tour through Greece, 1819; LEAKE, Travels in Morea, 1839.

Remembering that the Mycenian shaft diminished from top to base, it is self-evident that we have here the upper portion adjoining the capital. In this case, however, the draughtsman has certainly exaggerated the downward tapering of the shaft; were his presentation exact, we should have to assume that it reposed, not on the base seen here, but on some species of pedestal, a fantastic animal. Such an arrangement certainly

Fig. 278.—Tomb I. Green breccia fragment of shaft. Height, o m., 279. Width, o m., 278.

occurs in certain Assyrian columns, where they appear in low-reliefs; but the case does not apply here, and the conjecture must be abandoned; for the surface of the base is only thirty-three centimetres deep, and would not have lent itself kindly to carry a standing and far less a crouching animal or pedestal. Besides, the Hellenes never associated a pedestal with the column, which latter they carried down to the ground. Finally, there is a decisive reason why we should set aside the hypothesis under discussion; the shaft of the column in Tomb II. exhibits

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a very similar entasis, and there it reaches the soil without any intervening member, pedestal or otherwise (Fig. 198).

The difference between the upper and lower diameter may have been a trifle over ten centimetres, but certainly not more. The above result is obtained by reckoning the upper diameter at about 548 centimetres, and the breadth of the base surface fifty centimetres. The uppermost step of the base must have had a slight salience beyond the shaft. Were these shafts all monoliths, or made up of several pieces? We know not. The marks left on the wall by the sealing system will fit either hypothesis (s, s). In any case, the shaft was distinct from the wall; it gives on plan a semi-circle, and looks as if the architect

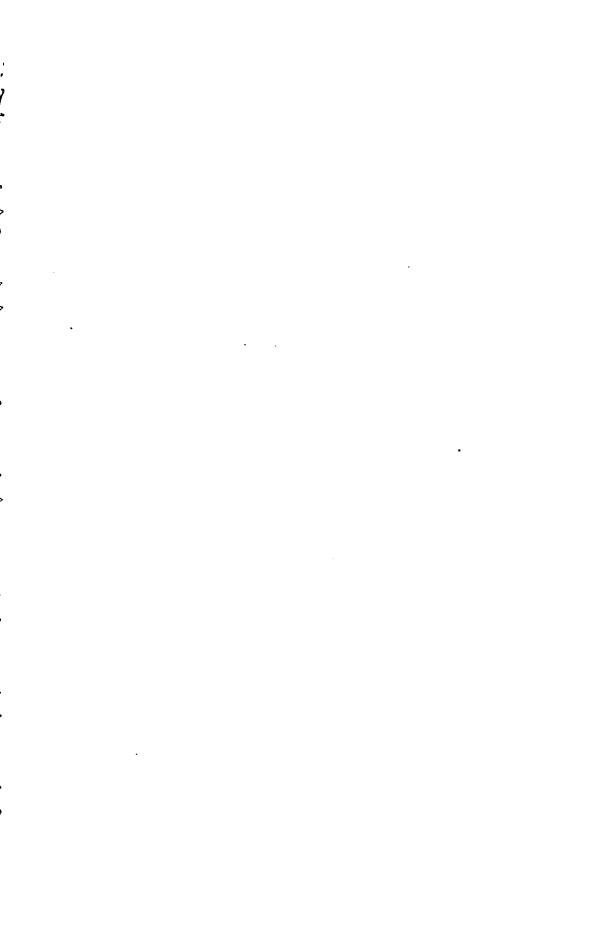
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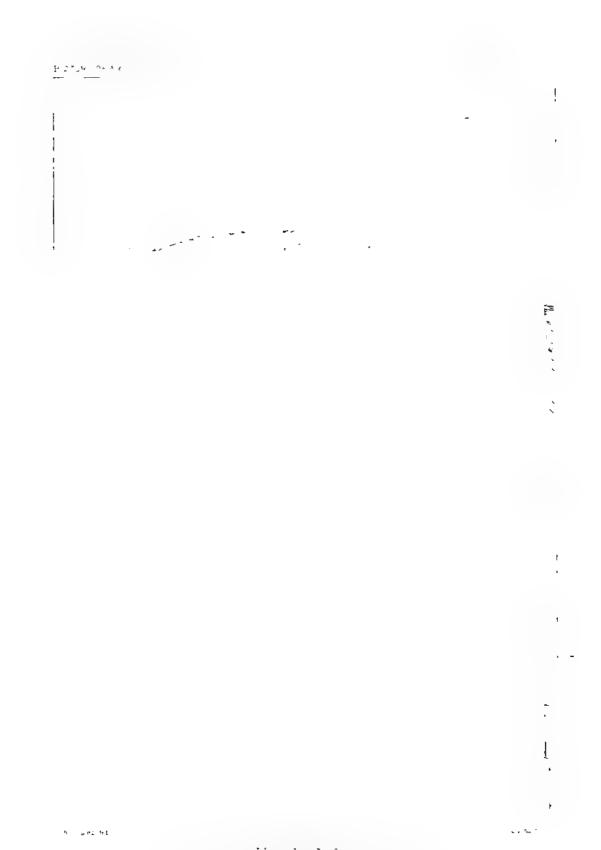
Fig. 279. - Tomb I. Green breccia fragment of the shaft. Upper diameter, o m., 5480.

had taken a column and split it lengthwise in twain, and then applied the two halves to the wall. In principle, semi-columns are totally different from engaged pillars, of which classic architecture will presently make so liberal a use. These are contrived in the masonry, and incorporated with it. Here the straight (back) face is smooth, and recalls those baguettes which a cabinet-maker glues on to the panels of a piece of furniture; the semi-columns were only held in position against the wall by clamps and pins. The largest of these occurs at about one-third of the total height of the shaft (ss). Traces of smaller dowel-holes are visible on the base and lintel, where they occur on a plane with the abacus, which is itself fixed to the corbel with bronze pegs. Multitudinous clamps served very well their purpose, which was to attach the pillars to the walls; but their want of mass

precluded their carrying a heavy burden, and if our restoration exhibits a projecting member over these pillars, which they seem to support, it is a false appearance, and not likely to deceive anybody. Flush with the fifth line of sealing-holes, above the letter v of section (Pl. IV.), appears a punctated shape, which below shows a block cut to an acute angle on one side, to fit the adjoining wedge-like stone, whilst the other end is inserted into the wall. The roughness of the block and its prominent situation indicate that it was never intended to be seen, but must have been concealed by a wide, projecting slab. We get a hint of what there was here from the façade of the neighbouring Tomb II., where, notably on the right side, between the doorway and the relieving triangle, we have part of a slab which projected far out beyond the lintel, and formed a ledge or pent-house. On the lower portion of this slab are chiselled, in low-relief, discs or roundels, in which we recognize the end beams of the roof (Fig. 118). We are quite sure that no such bas-relief ever existed in this situation on the frontispiece of the principal tomb. On the other hand, the semi-columns would have been incapable of bearing a heavy stone beam; as to a lining, which might have been fastened with clamps to the lintel, no trace of it has been found in the intervening space between the triangle and the doorway. The only possible solution, therefore, is that the pent-house was hollow, and entirely covered with sheets of metal nailed or riveted to one another, so as to bring this portion in harmony with the rest of the edifice. The hollow piece in question did not rest on the false columns, but on the corbelled stones of the wall right and left, where Pl. IV. shows a couple of sealing-holes. In this way not only was the pent-house married to the wall, but its extremities reposed on the widely-projecting slabs of the abacus, the ends of which were also embedded in the masonry. The columns carried nothing. With regard to the ornament of the brazen beam, we have selected such forms as are most affected by the Mycenian artificer - rosettes, spirals, and discs or beam-ends. We have been particularly mindful, in the rendering of our image, to show how much greater was the finish of workmanship, and how infinitely richer the aspect of bronze work, as compared with work executed in stone.

From the ellipsoidal shape of fine holes left by nails towards







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the upper edge of the lintel x, we learn the nature of the applied pieces which formerly stood there; namely, human or animals' heads; as the Mycenian artist, however, rarely attacked the human face, and seems to have delighted in the representation of huge animals, lions or bulls, we incline for animal figures. Remembering the castle gate, we have, like Donaldson before us, placed here lions' heads, the symbols of strength and courage. In the corners, at point y, are dowel-holes, which denote the formerpresence of two other applied pieces; the small number of sealing-holes does not allow us to surmise what these were. We have assumed that there once stood here an eagle or hawk, or some such-like figure. In describing the present state of the building, we adverted to the marks left by the door on the threshold (Fig. 256, RR, v). These indicate that two-thirds only of the wing were movable—the panel comprised between R and v remaining fixed—so as to facilitate the movement of the unwieldy heavy door to and fro. The same reason counselled the curtailing of the height of the folding-door; had it been carried up to its present elevation, five metres sixty centimetres, the labour involved in swinging it round would have been wellnigh impossible; hence the necessity of an impost or quiescent part. This, in our plate, takes up about one-third of the total height of the hollow. Was the portal closed by a grating, as conceived by Donaldson? We wot not. A sepulchral door must have been solid, to shut out light and prying eyes. We assume it to have consisted of wooden planks with a bronze plating, after the fashion of the Balawat Gates.¹ These metal plates are relieved by such forms as meet the eye throughout the building. The door is surrounded by a separate case, borrowed from a Mycenian rock-cut tomb, where it is painted (Fig. 234). As regards the mechanism of the lock, it has been evolved out of information gleaned in the Homeric poems. We have indicated the holes for the hook which served as key, by removing which the bolting beam could be drawn in and out at pleasure, by means of cords fastened to a ring which is seen between the holes in question.

The excavations of 1878 have shown that the wall coping of the dromos was neither horizontal nor "stepped." The junction between the front wall and those flanking the approach

¹ History of Art.

² THIERSCH, Die Tholos.

is well seen in Pl. VI. We have supposed the ends of the sidewalls as slightly overhanging, and projecting over the frontispiece; their relief served to enframe the cornice and help the monumental effect of the façade. On these saliences we have placed a covering slab of limestone, with double slope, of which many fragments have been found in the passage. The saliences in question are not visible in Pl. V., because the section was made at the back of this coping.

The restoration of the inner building (Pl. VII.) is justified and accounted for in advance by the arrangement of the sealingholes (Fig. 262). The shape and irregular spacing of the doubleholes between the third and sixth course prove that the surface was filled by a continuous frieze, composed of metallic laminæ.1 No stringent rule was laid upon the artisan to have all his pieces cut of the same size, provided they were kept of uniform height: all he had to do when he came to join the units together and put them in place, was to enlarge or narrow the spaces between his clamps, as the case might be. Thus, many a double-hole falls in the centre of a course, many another close Between the double-holes of the fifth bed are to a joint. smaller ones, which are absent from the fourth. The difference observable in the distribution of the dowels seems to indicate that the band was divided into two zones of unequal height. the lower strip we have put a continuous design, a row of crouching sphinxes, set in pairs face to face. The Mycenian artist has frequently resorted to this type and mode of grouping to fill in lengthy spaces. For the present purpose it will be enough to recall an ivory tablet, with a figuration of running sphinxes (Fig. 205), and a comb of the same material, where the sphinxes are lying down; whence we have derived the principal element of our restoration (Fig. 280). In furnishing the upper zone, we were obliged to take into account the small holes distributed over the surface; each one of these suggests a nail stuck into the middle of a separate ornament, a star, flower, or rosette.

¹ In 1862, Stark and Vischer, during an excursion to Mycenæ, cleared in part a small domed-tomb, "quite close to the Treasury of Atreus." This must be No. VI. or VII. They found "eine Erzeplatte an der inneren Fläche noch wohl erhalten." Though badly worded, the phrase can only mean, "A well-preserved plaque was still adhering to the inner face of the wall." [It may also be translated by, "the inner face of the plaque was still in good condition; i.e. the decorated side."—Trans.]

We have chosen the latter; on the authority of an ivory comb, where it appears between two sphinxes in the upper part of the field, which is also divided into two zones. Here, however,

Fig. 28c.—Ivory comb. Total height, o m., 86; length, o m., 144; greatest thickness, o m., o12.

the holes are too near each other to make it possible to put these forms lengthwise; in these intervals we find room only for one of those sinuous curves which so delighted the eye of the men of that period. To return to the dome. There is no uncertainty from the sixth course upwards; the smallness of the holes, the fashion in which they are distributed, without any fixed rule, over the surface, are suggestive of separate applied pieces, like those which we have introduced into the upper bronze zone. Stars, which would have endowed the cupola with something of the aspect of a constellated firmament, might have been thought of, but for the fact that among the unending patterns beheld on the golden discs which have been collected in the shaft-graves, there is one solitary specimen only with a far-off resemblance to a star (Fig. 281), and it has never yet been found among the

FIG. 281, -- Gold disc. Actual size.

sculptured and painted fragments of either tombs or palaces. Per contra, the rosette is seen almost on every single scrap which has been brought out of these ruins; hence it will cause no surprise at our having given it the preference. On the bronze door-case surrounding the entrance to the vault, we have put a series of spirals. The large square hole shown on the upper corner westward of the opening (Fig. 264), seems to call for a distinct ornament there; to have set up a lion's mask in that situation had been but to repeat the form seen on the external face of the lintel over the principal portal. For reasons of enrichment we have assumed that the vault was closed by a wooden door overlaid with bronze. Thiersch does not seem to have paid any great attention to this division of the building;

but Gell, a very attentive observer, noticed the holes for the bolts. Above the lintel, the discharging space was closed by a triangular slab. A scarcely happy note would have been sounded had it been left plain and bare; we have therefore reproduced here the pattern seen on the porphyry slabs, which fulfil the same function in the façade.

Had the circular chamber originally a furniture proportional to its importance? Local gossips informed Schliemann that the workmen of Veli Pasha had found "a marble table and a long bronze chain, from which depended a bronze candelabrum." 2 These objects, if they ever existed, which is doubtful, have disappeared; and on the slender strength of hearsay evidence we could not undertake to re-establish the accessories in ques-They are, moreover, details of minor importance; whether the vault was provided with a door or not, whether a lamp hung from a chain, will make no difference to the essential characteristics of the building, and it is these distinctive peculiarities which we have at heart to bring home to the reader, by means of our restoration. Our aim has been to give a general and true impression, so as to suggest a transient vision of what internally and externally an edifice, respecting which the Mycenian architect put forth all the resources of his art, may have been. If the reader has thus far followed our explanations, whereby we have accounted for our mode of procedure, he will have recognized that there is not one of the ornaments which figure in this unit but has come from the existing portions of the doorway and the column. The facings have not of course all been found; and it is quite possible that this or that band, of which scraps are to hand, does not occupy the place of its original in our restoration. But notwithstanding these substitutions, which we are far from conceding as facts, in despite also of lacunæ filled in from analogies that have not been lightly invoked, we flatter ourselves that we have grasped the spirit of this decoration, and faithfully rendered its general aspect.

The façade, imposing even in its mutilated state, has suffered

¹ Gell, *Itinerary*: "On the right, a door is seen which has been secured by strong bolts." So Dodwell, *Tour*. Neither of them saw the holes sunk in the threshold of the main doorway to receive the bolts, for at that time the sill was still hidden under accumulated earth; but those pierced in the lintel did not escape Leake (*Travels in Morea*).

² SCHLIEMANN, Mycenæ.

much more than the circular chamber. If the masonry, composed of well-wrought stones, is unimpaired, if the two semicolumns which flanked the entrance are alone missing, the whole of the upper part of the edifice is but the ghost of its former self. The closing slab of the triangle has gone, and left the space gaping; here and there cavities mark the place in the wall where stones have been; and the joints are mostly wide apart. Of the facing that once formed the flesh and epidermis of this great body, scarcely anything remains. Notwithstanding the shock which the spectator feels in presence of these signs of decay, his eye ere long follows with keen interest the ease with which were set up these materials, whose colossal dimensions fill him with astonishment; his artistic sense is gratified with the effect of the stately doorway, and its simple wreathing bands, towards which the eye is led by the vanishing lines of the long side-walls. The mighty effort which brought this structure into being is felt at every turn; it is an effort which pre-supposes, not only a large contingent of skilful and well-trained artisans, but the directing mind of a master, who begins to feel the subtle beauty of forms, and the charm of proportions. much more lively would be our admiration could we see this frontispiece as it appeared on the removal of the scaffolding, in all the freshness and splendour of its richly-coloured decoration, with the lustre of bronze and the gleam of white marble, married to the red and green tones of porphyries and breccias, perhaps also to the tender blue of enamels, where, as in the frieze of the Tirynthian palace, they were brilliantly relieved against alabaster. In the middle of the spirals of a fragment which we have utilized for the triangle (Fig. 265) are seen holes into which, mayhap, were stuck glass-pastes.1 Stone and bronze everywhere exhibit ornament of the most varied kind, chevrons and rosettes, palmettes, discs, and scrolls. Palmettes, though dependent on the same taste, permitted a certain latitude in their treatment. The painter, it may well be, added the lighter notes of frescoes to the polished surface of marble slabs which lined

¹ A Catalogue of Sculpture in the Department of Greek and Roman Antiquities, British Museum, by A. H. Smith, 1892: "Two of these bands are in low-relief, the third is in high-relief, with a hole bored in the centre for the insertion of glass or metal ornaments." Owing to the small scale of our illustration, the small holes and the difference of relief of the bands in question could not be indicated.

the middle division of the lofty wall, and amidst this superabundance of geometric figures the living form was represented by lions or bulls; if not full size, at least in the shape of masks about the lintel. From the juxtaposition of the several forms and the variety of incrustations was given forth a noble and severe harmony, which was in perfect unison with the destination of the building.

Although the decoration of the circular chamber could not challenge the more varied ornamentation of the façade, in its own way it was quite as sumptuous. Here metal reigned supreme. When the sun's rays stole in through the open door, or when the chamber was artificially lighted, a soft diffused light was reflected back by the bronze lining, and helped the eye to measure the height and breadth of the spacious nave. Even now, although the vaulted roof has been stripped of its bronze habiliment, and holed at the top, the remembrance of this dome dwells with the traveller who has once seen it; he cannot forget the finish of the construction, the simplicity of the means employed to obtain a desired result, or the strange curve which from the ground ascends in a continuous and unbroken line to the crown of the edifice. To picture to oneself what an addition all this brass was to the splendid decoration presented by the dome, a long and complicated inquiry, such as we have instituted for the restoration of the frontispiece, is not required; a little effort of the imagination will suffice. Another point which contributes to stimulate our curiosity, is that when brought face to face with this building we at once feel how widely different is the style seen here from all and any with which we have been previously acquainted. Of course certain elements will live on, and though in a modified form, will be easily recognizable; but others are fated to disappear for all time. If the arrangement of the temple in some respect recalls that of the Tirynthian palace, the cupola shape, for which the Mycenian builder had so marked a predilection, is absent from subsequent structures; whilst the whole of the decorative scheme will be discarded. The Hellenic architect will retain certain forms, the fluted column of our tombs for example, and the door-frame of the Erechtheion will be picked out with rosettes, like those of the Mycenian graves. But what we shall not find again at Athens or elsewhere, will be the habit of concealing meanness of materials by facings, to which

the wealth of designs, closely packed in fields divided into small compartments, will give a gauffered-like appearance. It is a style which we meet again in Arabic architecture, where it exhibits far greater refinement of workmanship. Phœnicia affords many examples of such facings and continuous ornamentation; but they will fall in disrepute during the classic age.

Tomb II.

Before the excavations of 1876, the only apparent part of Tomb II. was its lintel; all the rest lay buried under accumulations of silted-up earth and ruin. The work of excavating it was commenced by Mdme. Schliemann, but only completed sixteen years later (1892), by M. Tsoundas, who has not yet given to the world the result of his researches. Nevertheless, the drawings and photographs which he and Dr. Dörpfeld have obligingly placed at our disposal will enable us to convey an idea of the general characteristics and main divisions of this building.

The most striking difference between this tomb and the Treasury of Atreus is its having no side-chamber; its dimensions, however, are nearly as great, and the diameter of the circular chamber, if somewhat less, is made good by the greater length of the dromos (Fig. 282). Nowhere is the wall that blocked up the passage better preserved than here; it still rises to a height of two metres ten centimetres, and from the blocks of sandstone composing it and the distribution of the joints, we gather that it was built after the side-walls of tufa (Fig. 283), that is to say, after the filling up of the passage. Fig. 118 gives a general view of the façade; its lower portion, in plan and elevation, appears in Fig. 198. Fig. 284 is intended to show the sealing-holes, which served to fix the semi-columns to the wall. The alabaster capital (Fig. 274, on the right) which was picked up at the foot of this façade was at first supposed to belong to our column; the greatest diameter of the capital, however, is 355 centimetres, and could not possibly be fitted to

a shaft which, at one metre above the base, is already fifty-eight centimetres in diameter. It probably came from some smaller building hard by. Be that as it may, it undoubtedly bears a strong resemblance to the one we have described; and the ring of leaves which surrounds the lower portion of the abacus is still discernible, in spite of its worn condition. As in the shaft and base of the column, so in the capital, there may

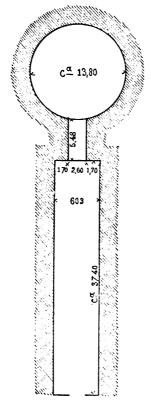


Fig. 282 .- Tomb II.

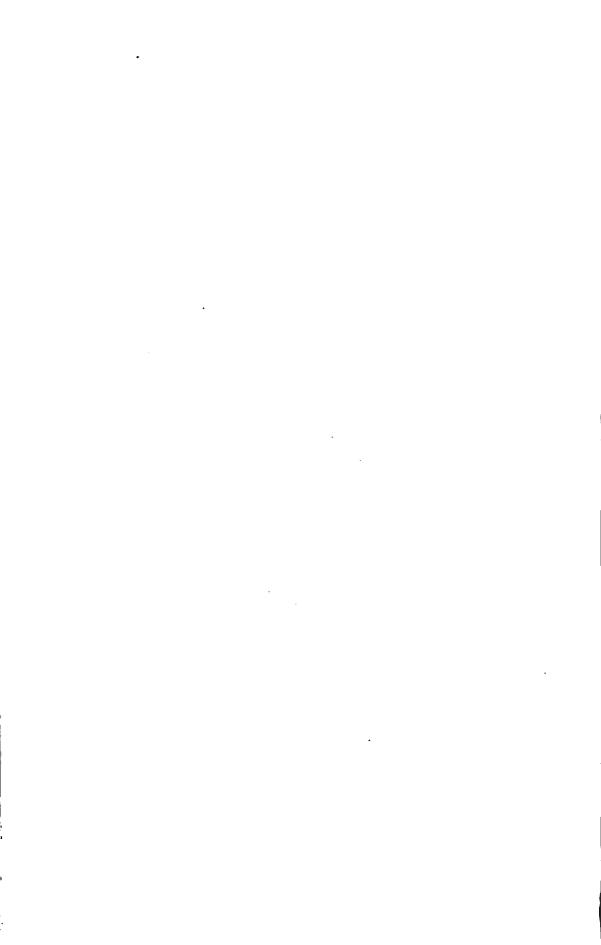
have been slight differences of detail from one grave to another, but the dominant lines were uniform. Thus, the capital of red stone preserved in the museum at Charvati, though smaller than the alabaster specimen, is undoubtedly drawn on the same model. Respecting that portion of the façade enclosed by the pilaster-like bands and a double salient course which plays the part of cornice (Fig. 118), are we to infer that it was entirely overlaid with a mosaic-wise casing, as in Tomb I.? We think not. Right and left of the relieving triangle are no traces

of dowels, but the rough surface of the wall can hardly have been left exposed, and may have been faced by coloured plaster. What lends colouring to this conjecture is the fact that other parts of the façade preserve important remains of a decoration very similar to that of Tomb I., both in workmanship and intention. Dr. Adler raises the question whether a very rude lion's head of grey trachyte which he saw in the museum at Charvati is not one of a pair that once stood upon the widely-projecting slabs of the capital.¹ Between these,

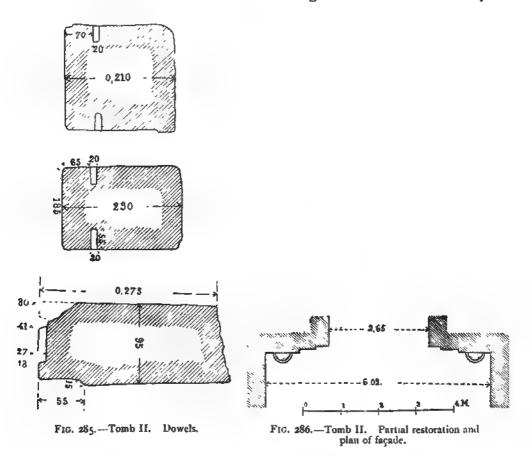
Fig. 283.—Tomb II. View of transverse wall at the entrance of the dromos.

above the lintel, are slabs of bluish-grey marble, on which there is cut, in flat relief, the beam ends of a roof; they form a pent-house whose salience was less than that of the brazen beam of the neighbouring tomb. Two of these slabs are in position. Other fragments of the decoration were brought out by the excavations; here it is a band of this same marble with spirals, there two others, but this time of red porphyry; on the one are seen triglyphs and metopes, and spirals on the other. The latter must have been part of the external slab closing the triangle. It is quite unnecessary to reproduce these oft-recurring

Fig. 284. Tomb II. Showing semi-column and scaling-holes.



designs (Fig. 285). The dowels which occur in the adjoining sketches will suffice to show that the mode of assemblage, whether in Tomb I. or in Tomb II., was precisely similar. The transverse sections of Fig. 285 show the pieces in question in the order followed by us, from top to base. The lower portion of the last block has lost its facing, whose salience doubtless coincided with that of the contiguous stone immediately



below. The stones were clean cut, set close to each other, edge against edge, and secured at the back by clamps.

Without prejudging the question of a capital which has disappeared, or a surface decoration—enhanced perhaps by painting—completely obliterated, we can at any rate restore, with a high degree of probability, the bands which composed the penthouse and the relieving space (Fig. 286). In this manner we obtain a partial, though incomplete restoration, which goes far to prove that this façade, though less magnificent than that of the

Treasury of Atreus, was yet adorned in the same style. Its fragmentary facings exhibit the same processes and the same forms as those manifested on the neighbouring edifice, including rich incrustations of red, green, bluish, and white marbles. The tomb is apparently built on the lines of its greater neighbour; but the work was carried out on a simpler plan, and apparently

Fig. 287.—Fragment of sculptured slab. Height, o m., 57; width, o m., 67; thickness, o m., 10.

without the aid of bronze in any part of the edifice. The Elgin collection in the British Museum contains two fragments of doubtful origin, probably from some domed-tombs. Their green tone recalls the very similar slabs of calcareous breccia at Orchomenos. The side of one of these pieces is obliquely cut, and announces itself as having come from the closing system of the triangle (Fig. 287). The right side is occupied by the head and shoulder of a lion; and the left by a leafy branch,

which recalls a laurel or olive. The hollow of the leaves is filled with bronze laminæ. The other fragment is a rectangular slab, on which are outlined, in slight relief, the fore-quarters and the lower part of the body of a bull, facing west. The upper part of the body and the head are continued on the adjoining stone. A pendant to this figure probably existed on the other side; and the two formed the central group in the frontispiece of some tomb or other, like that seen in Pl. VI., for which we have indirect if not direct authority. If the fragment in question was not utilized in Tomb I., it is because its size and material forbade our so doing.

Rock-Cut Tombs.

A sufficient number of ground-plans and sections of rockcut graves at Mycenæ and Nauplia has been given, in our general description of the Mycenian world and the study of funereal rites, to make it unnecessary to do more than refer to them here (Figs. 122, 128, 132, 137, 143, 144, 164, 165, 246, 249). Judging from the existing sepulchres which belong to the golden days of Argolis, we may expect to come across others of the same nature in that district. M. Staïs, during his researches in Epidaurus, lighted upon chambers situate on the road which leads to a spot called Palæa-Epidaurus.1 The arrangement of these hypogæa, and the style of the pottery collected in them, convinced him that he had laid hands on graves which chronologically may safely be placed in the same class as those we have reviewed. M. Staïs takes as type a circular grotto, cir. four metres broad and two metres high, with a dromos six metres long, blocked up by huge stones. Close to one of the skeletons there was a well-preserved spear-head of bronze. Elsewhere, the body, instead of being interred in the depths of the virgin rock, was found lying in a species of recess built with undressed stones piled up one upon another. It was a quicker way of going to work, and seems to have been generally employed by the oldest inhabitants of Attica. A number of very

¹ Λελτίον αρχαιολογικόν, 1888.

similar graves has lately been uncovered on the Athenian Acropolis.

Tombs become more simple and rude in construction in ratio to their distance from Argolis. Those met with in the Cyclades are no more than holes dug in the ground; but wherever the sepultures have had greater care bestowed on them, the sides are lined with slabs set up edgewise; and a covering slab is horizontally placed over a cavity in which the body can only have reposed in a squatting posture. Sometimes, as at Melos-Philacopi, the chambers, being rock-hewn, are unprovided with a dromos; they then open directly on the outside, and are therefore less well hidden than in Argolis.

The excavations which have been systematically and carefully carried on in Cyprus during the last few years, have enabled MM. Ohnefalsch Richter and Dümmler to classify the necropoles into distinct periods, answering to different phases in the existence of the inhabitants.² The separate finds of the various sepulchral groups have been subjected to a critical and searching analysis; this has led them to recognize in these objects the products of a civilization intimately related to that of Troy, of which in fact, like that of the Cyclades, it was but the continuation. So striking does this correspondence and agreement appear to them, that Dümmler goes farther in this direction, and is inclined to believe that such tribes as first buried in Cyprus the tokens of their laborious activity with the dead, came from the same stock as the clans that raised the Trojan walls. The racial question will probably never be solved; but this does not deprive the result of these investigations of their historical value.

¹ Athenische Mittheilungen.

² DÜMMLER, Mittheilungen von den griechischen Inseln, IV. (Athenische Mittheilungen); M. Ohnefalsch Richter, Kypros: The Bible and Homer, 2 vols. 4to, 1893. This last work, the result of well-conducted excavations covering over twelve years, is so ill edited that one is driven to the plates for elucidation, which it is hopeless to seek in the text. Moreover, it is not easy to grasp the reasons which counselled the order followed in the arrangement of the plates, whilst it is difficult to find the information one is looking for in the mass of irrelevant matter which fills up a great part of the book. He would have done better, both for himself and the public, had he confined himself to the reproduction of the numerous monuments which he has either exhumed himself or seen exhumed, and which are as yet unpublished. Instead of that, he has engraved a whole range of figures to be found in older works, many of which have but a very distant relation to Cypriote art. By so doing, also, the exorbitant price of the book would have been greatly reduced.

It may be safely laid down as an established fact that the island at an early date, ere the Phœnicians got a foothold there, was occupied by a rather dense population, which almost unaided manfully strove to unfold a rudimentary industry analogous to that which has been met with along the whole line of coast of the Ægean. Graves bearing the mark of that epoch are now dug in the ground, now rock-excavated; but wherever they are not mere holes hastily made in the earth's surface, they present a uniform arrangement. They then consist of a vertical rectangular shaft, about one metre at the main sides (Fig. 288), having a mean depth of from one to two metres. The bottom of the well is fitted with a species of niche, oven-shaped, which is

Fig. 288.—Cyprus. Tomb at Haghia Paraskevi.

pierced in one of the small sides, and forms the grave strictly so called. A corresponding niche sometimes occurs on the opposite side; elsewhere the vault is one with the axis of the shaft. But no matter its situation, a slab invariably forms its covering. The bones seen in these cavities are generally in a very reduced condition; in one alone were ashes mixed up with them. Pottery is plentiful; single niches have yielded as many as thirty and forty specimens apiece, along with tools and weapons. There was no apparent sign to indicate the site of the grave.

M. Dümmler is too discreet and attentive an observer to make it safe to question his conclusions; they call, however, for some reservations. From the condition in which the bodies were found, he seems inclined to believe that the cremation rite was practised by the tribes to which he ascribes the earliest graves

in Cyprus.1 But we have proved that throughout the primitive period, wherever the graves were sufficiently well preserved to furnish sure indications, these always show, in no unmistakable language, that inhumation, not burning, had been practised. Finally, in the later tombs of Phœnicia and Cyprus alike, a shaft serves as entrance passage to the vault, whilst the graves of prehistoric Greece are approached by a horizontal or gentlyinclined dromos. One is tempted, therefore, to ask whether the habit of placing the chamber at the bottom of a well was not borrowed by the early inhabitants of Cyprus from Egypt, or rather Phœnicia, its near neighbour. On the other hand, these tombs contained no imported objects which could be attributed to either of these two countries, where, at any rate in remote antiquity, the dead were interred without having passed through fire. There are, then, very peculiar characteristics about Cypriote necropoles, respecting which we do not care to commit ourselves; we could not, however, pass the island by without pointing it out to future explorers.

¹ Dümmler.

CHAPTER VI.

RELIGIOUS ARCHITECTURE.

IF in the introduction nothing was said of religious rites expressive of the beliefs which once had swayed the tribes fated to become the Hellenic nation, it is because there is no documentary evidence to hand referable to that subject. The vague and faint reminiscences which the Hellenes preserved of the period answering to the infancy of their race have no passing allusion to them. The parts assigned to the gods, the exact and rich terminology by which they are distinguished in the Iliad, indicate that, like the heroes, they already had a long past behind them. Images drawn with so distinct and clear an outline are the result of an elaboration many centuries old; whether at Troy, Thera, Tiryns, and Mycenæ they should be placed towards the beginning, the middle, or the end of the primitive period, is not easy to say. Plastic art was not yet sufficiently advanced to translate with any degree of clearness the notions formed by the men of that day in respect to superior powers. Terra-cotta idols from these localities are too coarse and rude to give us any clue as to the feelings and thoughts which they express (Fig. 246). On a shockingly mutilated tablet of limestone are apparently represented two women in the act of worshipping the statue of a god. Other paintings and engraved stones show us the evanescent outline of fabulous, strange-looking creatures, akin to the simulacra which Asiatic art multiplied, griffins and sphinxes, winged personages, and human bodies with animals'

heads; but the fragmentary and poor state in which they are found supply us with no sure indication wherefrom to define the religious conception of which they are the embodiment, save that they seem to belong to the religious stage which is sometimes termed "polydemonism."

The same uncertainties beset us when we turn to the architectonic remains. Figured on five very similar golden plates that have come from two Mycenian pit-graves, is the façade of a building which has been identified with that of a temple (Fig. 111). Doves are perched at the corners; that is to say, in precisely the same situation as they appear on a coin from Paphos, which shows the elevation of the famous temple of the

Fig. 289.—Small gold plaque. Actual size. Fig. 290.—Small gold plaque.
Actual size.

Cypriote Aphrodite.¹ So too, in this same series of gold ornaments, doves hover above a nude figure, and flutter about her; her hands are pressed to her breasts (Figs. 289, 290), a gesture often pointed out and figured by us from numberless terra-cotta statuettes belonging to Chaldæa, Susiana, Phœnicia, and Cyprus.² It also characterizes a unique lead idol discovered at Troy (Fig. 291). The attitude suggests the goddess of nature and fecundity, whom the nations of Anterior Asia worshipped under many names, Zarpanit, Mylitta, Nana, or Ashtoreth, according to localities. The Syrian origin of both temple and idol is further emphasized by the part played by the doves. These birds were selected by the Hellenes as appropriate victims to be offered on

the altars of their Aphrodite; the faithful mounted to her temples carrying a dove in their hands, as an earnest of the worship which was paid her, a symbol of her creative power. Doves nested in her houses and peopled the precincts. Accordingly, there is

Fig. 29t.—Lead idol. Actual size. Height, o m., 65.

a strong presumption that both figurine and small temple are objects imported by the Semite, or home-made copies of the same. If our leanings are for the last hypothesis, it is because in the entablature surmounting the central opening—above a massive architrave composed of four or five beams—below a frieze-like salient cornice—is seen a portion of the ornament which

¹ History of Art.

we have compared to the metopes and triglyphs of the Dorian frieze, and placed in that situation in our restoration of the palace (Pls. XI., XII., and Fig. 227). Are we, then, to conclude that the form in question was borrowed by the Tirynthian decorator from Phænician models? This of course is not impossible; but we must own to having met nowhere among the Phænicians, either in their architectural remains or on their wares, a design which is so liberally employed by the Mycenian ornamentist.

One is tempted, therefore, to think that the Greek artificer, whilst deriving his inspiration from a foreign type, put his individual mark on it; and if the assumption be allowed, it would explain the far-off yet undoubted resemblance observable between this façade and that of the Tirynthian palace. There is first a foundation of well-jointed stones; above this follows a construction the visible parts of which are seemingly carpentry work. In both edifices there are three doorways enframed by massive timbers. The height of the middle entrance of our gold plate far exceeds that of the side openings. This was doubtless done to provide a lantern with windows at the sides for lighting the inner edifice. The salient beam ends of the flat roof, which served to keep in place the earth covering, are well brought out at the corners. The entrances about this frontispiece are the only points which are somewhat problematical. doors intended to be open, and the columns seen in the centre of the openings meant to indicate rows of pillars extending right through the inner hall? Should the curvilinear shape that surrounds the foot of the shafts be identified with one of those great basins placed in front of porches, like the vase at Amathont for example? Or is it a mere decorative form applied to the door surface? It is hard to say. But these are after all minor points, and however interpreted, will not greatly modify the main characteristics of the building. The triple division of this facade recalls that of the Tirynthian and Mycenian palaces, the groundplans of which may be read on the ground. Could we be sure that this amulet was wrought at Mycenæ, by an artist who did his best to reproduce the outward appearance of some edifice of his native place, it would enable us to assert that Mycenian Greece had temples whose arrangement was practically identical

¹ This detail was first noticed by Schuchardt (Schliemann's Ausgrabungen).

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with that of the palace. Against this view there are certain doubts that we cannot shake off as to the origin of this golden plate. We detect, it is true, peculiarities that seem to bear the sign-manual of the native artisan; other features, again, carry the thought to the cults of Syria and her special rites.

In such conditions as these, the historian has no choice but to keep on the reserve. Nowhere has he found, whether at Troy, Tiryns, Mycenæ, or elsewhere, remains of structures to which, from the arrangement of the plan or other sure indications, he can confidently ascribe the character of temple or chapel. Temples

Fig. 292 .- Temple on Mount Ocha.

strictly so called, it would appear, were as yet exceedingly rare in the Homeric period; allusions to sacred woods and altars set up beneath their mysterious shade are much more frequent in the Epos than to temples in our sense of the word. Two sanctuaries, the one on Mount Ocha in Eubœa (Fig. 292), and the other at Cynthus, in the island of Delos (Fig. 293), are generally put forth as the oldest known on Grecian soil. Their

¹ On the sanctuary of Mount Ocha, see Urlich's account (Annali dell' Instituto); WELCKER, Kleine Schriften, and Rheinischer Museum N. F., 1856; J. GIRARD, Mémoire sur l'île d'Euhée. Bursian has described three diminutive temples found in the same district, near Stoura, which are reproductions of the Ocha building in small (Die Dryopische Bauweise, &c., in Arch. Zeitung). On the sanctuary of Delos, read Lebkque, Recherches sur Délos.

situation on the mountain side, the style of the masonry, which consists partly of enormous blocks dressed fair, partly of units left in their native rudeness, have all the appearance of leading back to remote antiquity; nor is the presumption that there is at least a passing allusion to the sacred grove of Cynthus in the Odyssey devoid of verisimilitude. Even admitting this much will not enable us to confidently place the construction of the grotto in the Mycenian period; for it may after all only date from the

Fig. 293.-Cynthus. Sacred grotto.

time when the soaring genius of Ionia began to awake, causing her to take possession about the same time of the Cyclades, and the strip of coast, in Asia Minor, which intervenes between the mouths of the Hermus and Mæander. As regards the temple on Mount Ocha, there is some difficulty in believing that so important an edifice can have been erected at an elevation of cir. 1400 metres by semi-savage tribes sparsely distributed over the island, whose name history does not record. We have a different hypothesis to put forward. Might not this be a much later work of wealthy Karystos, situated at the very foot of Ocha?

The scene where Zeus unites himself in holy matrimony (lepòs γάμος) with Hera, which in the Iliad occurs on Mount Ida, was placed by local tradition on the Ochæan heights.1 There was doubtless a day about midsummer, when all the folk from the country-side and the Attic coast hard by were gathered together on the mountain top, to hold a general assembly (panegyria) in honour of the august couple, even as the modern Greeks pay their regards to the Panaghia, or some saint of their calendar, by an al fresco festival. We may assume that at a given time, to endow the meeting with greater brilliancy, the Karystians decided to build a temple on the small plateau parting the two terminal rocks of Ocha, where no structure wherein a statue might be lodged had yet appeared; a rustic altar formed of unhewn blocks or clods of turf being the only visible sign of a sacred character. With the pliability to which Grecian art bears ample witness, the architect entrusted with the undertaking suited his work to the very peculiar conditions in which it had to be carried out. What was the good of building porticoes that could not be seen at a distance?

For the sanctuary, be it remembered, is invisible until you come upon it at the last turn of the winding path. Pillars, moreover, in a position liable to be swept by every wind that blows, could not long have kept their erect position. Delicate ornament would soon have been eaten by damp arising from snow, which remains for months on the ground. What was wanted here was a building that should combine, with the solidity of the rock against which it leant, a surface whereon Boreas might beat in vain. That the builder satisfactorily solved the problem is proved by the condition of the oblong hall, which is whole; the huge covering slabs, set up in such a way as to form a four-fold sloping roof, have not been impaired or given way under the weight of the wintry snows of thousands of years. For my part, I cannot see the reason why this temple should not be placed in the eighth or seventh century B.C., when Eubœa, which had grown rich by agriculture and a flourishing industry, was sending out the surplus of its population, together with the Greek language and Greek arts, to Trinacria, Italy, and the peninsula calling itself Chalcidica, in remembrance of Chalcis, the mother-country. The question can only be decided one way

¹ STEPHANUS BYZANTINUS.

or another, by paying special attention to the broken pottery that may be discovered in the Delian cave, or within the precincts of the temple. In this manner we should be able to determine whether such potsherds belong to the Mycenian or a later period. When the excavations at Delos took place, the farreaching importance which attaches to this special field of inquiry was as yet very imperfectly understood, and Mount Ocha was left untouched by the spade.

Was there in those far-off days aught answering to our notions of a temple? Though unable to disprove it, one is inclined to doubt it. Primitive religion takes its being and inspiration from the mystery that surrounds death. Its temple is the tomb, within and above which are performed the rites which the family and clan render to their dead. We have shown how great a place such worship held in the life, the ideas, and thoughts of the societies whose history we are endeavouring to re-constitute. When the citadel walls of Tiryns and Mycenæ were erected, the Achæan clans had doubtless stepped beyond the initial period, when religion is no more than a simple fetichism; they were on the high-road to polytheism, and had begun to personify the forces of nature, under names which we know not, under semblances hard to grasp. Their minds were already busy in chalking out those divine types with which the Homeric tales have made us familiar. Inductions drawn from our knowledge of the laws which regulate the development of religious thought are corroborated at every turn by monumental testimony. It may well be that these types had not yet assumed enough consistency to have made the need felt of assigning to each god, or at any rate to the dis superis, special dwellings where they were fabled to live in regal state, like princes in their palaces. They may have been content to offer them, in open but enclosed precincts, the tribute of prayer and sacrifice, pouring the blood of victims, whether in a built pit, such as the slab circle at Mycenæ (Figs. 102, 103), or the fenced enclosure in the court of the neighbouring house, or the inner square of the Tirynthian palace (Figs. 81, 82), or on one of those altars figured on the mural paintings of Mycenæ and the glass-paste amulets (see tail-piece, end of chapter). In this way would be explained why temples have not been discovered on the sites of Mycenian

strongholds, and why the honour of inventing an edifice, in the erection of which architects, sculptors, and painters joined hands, redounds to the men of the following epoch, when with the great artists of the fifth century it became the masterpiece of the plastic genius of the Hellenes.

CHAPTER VII.

CIVIL ARCHITECTURE.

Fortified Towns and their General Characteristics.

Our general description of the remains of the prehistoric buildings of Hellas must have given the reader some notion relating to the characteristics of the construction and arrangement of fortified enclosures which, to the ancients, seemed to be the work of superhuman beings, the Cyclopes. Hence it only remains to draw attention to certain details, so as to justify our attempts to restore the citadels of Tiryns (Pl. VIII.) and Mycenæ (Pls. IX., X.). In these plates the trace of the wall is taken, with rigorous exactness, from the plans of Dr. Dörpfeld for Tiryns, and from Captain Steffen for Mycenæ. We have confined our task to re-establishing the upper portion of the wall, which has everywhere been destroyed. In its present state, the greatest vertical height at those points where it is best preserved is seven metres fifty centimetres in the lower Tirynthian citadel, and at Mycenæ, on the south-west front, near the point L, a little over thirteen metres.1

The chief characteristics of all these fortresses reside in the fact that they are not planted, like the acropoles of Amasia, Pishmish-Kalessi in Asia Minor,² Polyrrhenia and Phalasarna in Crete,⁸ on the summit of perpendicular rocks, at enormous

¹ Schliemann, Tiryns.

² On the Amasia citadel, see G. Perrot and E. Guillaume, *Exploration archéologique*. Upon Pishmish-Kalessi, *History of Art*.

³ Relative to Polyrrhenia and Phalasarna, G. PERROT, L'ile de Crète, Souvenirs de voyage.

heights above the valley, where the escarps of the cliff make all attempts at an assault impossible, and leave little to be added by the architect to the work of nature. On the other hand, the difficulties of access are so great, even in time of peace, as to render relations with the lowlands irksome and arduous. Such fortresses are either impregnable shelters or freebooters' dens. In either capacity, circumstances are adverse to their growing into populous centres, and becoming the residence of chiefs having large and intimate dealings with the masses -artisans, labourers, and mariners-grouped in fertile lands or along sheltered coasts, under the protection of their masters. On the contrary, the acropoles, whether of Troy, Tiryns, or Athens, are very little above the surrounding plain; they are sufficiently close to the sea to have their boats moored in one or another of its creeks, frequented by alien traffickers. They are far enough from the shore to enable the garrison posted on the wall to follow the movements of a hostile force that might have suddenly landed on the coast, giving it time to prepare for defence or sally forth to meet the foe. If in the first encounter the attacking party succeeded in breaking the lines of the defenders of the castle, these would fall back towards the friendly shelter of the walls, whither the enemy would follow, only to be broken against the impenetrable and lofty barrier. Then it would frequently happen that the soldiers massed on the curtain successfully repulsed the aggressors with stones and other missiles, obliging them to effect a hasty retreat, and closely pursuing and compelling them to embark on the ship that had brought them.1 Reverses alternating with successes, checks followed by renewals of attacks, provoked by the obstinate resistance of the besieged against the dash of the vanquisher, are easily grasped, when one tries to picture to oneself the many incidents likely to have occurred in a battle fought around Tiryns or Troy-granting that Hissarlik occupies the site of Ilium—such as they are delineated with its varying fortunes in the tales of the Iliad, where the strife, from the first combat to the death of Hector, is waged between the town and the ships.

¹ In this way Patroclus, after having pursued and routed the Trojans as far as the city gates, thrice attempts, but in vain, to scale the wall (*Iliad*). The Greeks, unable to force an entrance, fight in front of the Scæan Gates until nightfall.

The Mycenian acropolis can scarcely be classed in this category. Its distance from the sea, as the crow flies, is fifteen kilometres, and from Nauplia close upon nineteen. It is fenced by two mountains; its walls, unlike those of Tirvns, which rise sheer from the plain, overhang deep ravines on the north, south, and south-west of the citadel, thereby adding to its strength; whilst on the side which faces the Zara, the rock below the wall. down to the bed of the Chavos, is almost perpendicular, and about forty metres in height. If by themselves the ravines could not render any attack well-nigh abortive, they did not prevent free intercourse between the castle and the outlying country. The hilly mass was not isolated. A narrow crest connected it eastward with the pass which interposes between the Haghios Ilias and the Zara, and westward a broad isthmus joined it on to the low ridges which slope down towards the Inachus. Here, too, the value of the position resided above all in the strength of the ramparts; a value which the rulers of Mycenæ had increased manifold by advanced works raised around the fortress where they were enthroned, both at the entrance of defiles that led to their territory, or on mountain tops ruling it. We are not concerned with the political history of Greece; hence we shall not, on Steffen's example, try to show how important was the site of Mycenæ from a strategic standpoint, situated as it is at the converging of roads coming from the north; and how in a campaign against Argos, starting with Corinth, its possession would assure the same advantages to an invading force as that which Decelia afforded to Attica.1 In the same manner Nauplia, the only harbour Argos possessed on the gulf, would be cut off by Tiryns, unless she was the ally or subject of Argos. Hence it came to pass that, with the growing ambitions of the latter, it was felt that its own safety would be imperilled unless these two townships were not only deprived of their independence, but of their inhabitants also. To have brought them to acknowledge the supremacy of Argos was looked upon as an insufficient measure, one, too, fraught with danger. The destruction of the walls would have been the surest way of accomplishing the end proposed; if these escaped, it was because of the enormous materials of which they were made, to demolish which would have involved too great an expenditure of time and labour.

¹ Steffen, Karten von Mykenai.

The reminiscences which they recalled doubtless had something to do in preserving the old stones, bound up as they were with the past of their race, which the mythic cycle pictured forth in vivid and abiding colours. Had not Tiryns been the cradleland of Heracles? Had not Perseus, the tamer of monsters, built the walls of Mycenæ? Was not the tale full of the deeds of the Atridæ who had been enthroned here, and whom Argos, when Mycenæ fell, did not fail to claim for her own, as helpful in the part she aspired to play in Peloponnesus; just as Athens, her ally, made use of the exploits and victories of Theseus over the Amazons for precisely the same ends?

The desired result could be obtained without having to undo the stupendous labours of the Cyclopes; nor was it necessary to open large breaches and dismantle them, that is to say, tear down the heavy gates and strip the curtain of its breastworks and galleries; left to themselves, the fortifications would soon fall into decay. The work of destruction which fire had commenced, would ere long be completed by the weather. defences the stone wall was always surmounted by crude brick or breastworks of timber, without which the besieged, exposed to the darts of the enemy, would have been unable to maintain themselves on the wall. Modern war-engines, and the invention of artillery, have wrought little change in the conditions of siege warfare; we could therefore have predicted the presence of parapets here even without the traces they have left behind. At Troy, sun-dried bricks have been found in position on more than one point; and it is self-evident that the vast quantities of ashes and charcoal found around the bricks can only have come from the rough timbered works which served to protect the soldiers posted on the round-walk, or on the platforms of the bastions by the gates (Figs. 41, 181).

At Tiryns also, where certain portions of the circuit had lain concealed under heaps of ruin and earth, until the excavations of 1885, Dörpfeld found, in the upper part of the existing wall, many crude bricks in a semi-calcined condition; he also noticed at the inner corner of the eastern rampart, opposite to the great propylæum (Pl. II., in front of RR), stone bases, on the surface of which has been cut a circle with a diameter averaging fifty-five centimetres (Fig. 197). There can be no doubt, he says, that we have here the remains of a colonnade which formed a passage

around the wall, at least in places. There were wooden uprights, spaced about two metres fifteen centimetres, resting on stone bases, along the inner side of the rampart, here four metres forty-five centimetres; without rose a continuous brick wall, pierced by windows for the defence, and roofed over with joists, clay, and baked tiles. Built up flush with the great stone wall, at this point nearly five metres high, the back wall of the passage added to the elevation of the vertical face. It is supposed to have been covered with wood and clay, and furnished with openings for the defence.1 The arrangement is akin to that of the Athenian walls, at the top of which ran a covered gallery, consisting along the inner side of a row of separate piers, and a continuous brick wall outside, etc. These walls were restored towards the year 323 of our era, and it is from the decree ordering the execution of the work that we gather their distinctive peculiarities. A restoration of these same walls, which is doubtful only on details of minor importance, has lately been made.2

With Mycenæ the case is different. The principal buildings were placed on the summit of the rock, at a considerable distance from the circuit (Figs. 89, 90); they were not therefore supported by, nor did they lean against it, as at Tiryns; so that their mutilated limbs did not protrude above and form a preserving mattress for the crest of the rampart. The upper part of the wall was everywhere exposed, and in process of time the stone and brick constituting it got loose and rolled down the sides of the rock. We should, then, not be surprised because we find no traces of fire, or of bases for uprights as at Tiryns and Troy, where they afford clear indications towards a restoration of the crowning members of the rampart. Mycenæ can only be put back by analogy. Then, too, it is more than probable that here, as at Tiryns and Troy, wood and brick went to the making of breastworks, at any rate on such points as were most exposed to the attacks of the enemy, and therefore in need of additional strength.

Our attempts to restore ancient strongholds have not extended to Trojan Pergamus. The excavations carried on there

¹ Tirvns.

² C. I. Attic. A. Choisy, Études épigraphiques sur l'architecture grecque, 1884.

at the present moment (June 1893) are not advanced enough, nor do they establish with sufficient distinctness the successive stages through which the fortress passed, to make possible the restoration of a structure uniquely composed of elements, the relative age of which has been determined with certainty. over, the unlovely appearance of rubble walls, overlaid throughout with mud, would have been exceedingly unattractive. quite different at Tiryns and Mycenæ. There the circuit-wall has been cleared along its whole perimeter, and the mass, with the exception of a few gaps, stands revealed before the eye of Moreover, the colossal materials of which the the beholder. masonry is composed are suggestive to a practised eye of the stupendous effort which was required to erect these redoubtable citadels. Hence, in Pls. VIII., IX., X., we have done our best to reconstruct the walls of the fastnesses in question, showing them as they must have been when, fully equipped for defence, they made ready to sustain a siege. Above the dentalled line of walls we have shown the top of spacious and richly-decorated royal habitations, with many towers and gates, with stony masses soldered on to the escarp of the rock, the whole forming an effectual protection both against turbulent subjects and the attacks of inimical forces.

That our perspective views of the two restored acropoles should have a continuous crenelation along the whole length of the wall coping, cannot come as a surprise to the reader. The employment of embattled edges leads back to the glimmerings of fortifications in every country. Nature itself is the teacher and model. Is not the first instinctive movement of every man. on perceiving that a ball or arrow is speeding towards him, to "file" or slip behind anything that happens to be at handstone, tree, faggots, or earth, in order that he may avert the blow, or at least minimize the chances of being wounded? What are crenelations but these haphazard shelters transferred to the wall top? Sometimes they were movable and provisionary, thought of at the very last moment, just as the assault was impending; and in that case they would be no more than a few faggots or sacks of earth hastily placed on the rampart. As, however, aggressions were of frequent occurrence, it seemed more natural to make crenelations permanent, and connect them with the construction. Pl. VIII. shows examples of two methods

that could be adopted with equal success. On the resaults of the circuit, which play the part of towers, we have put a crenelation formed by a huge single block, like those constituting the wall, and placed in such a way as to make it project beyond the terminal course. To have distributed and bedded hundreds of such blocks along the wall coping would have involved too protracted and arduous a labour. At Troy they discovered a more speedy process, which consisted in surmounting the stone wall by one made of clay. A brick embattlement could be run up in a few hours; hence we have planned our parapets in this way both at Mycenæ and Tiryns. There are no possible reasons for thinking that the Mycenian builder did not find out for himself the contrivances under notice. He was stimulated thereto by the conditions of the surroundings in which the sphere of his activity was exercised, and also by the wealth of the materials to his hand, the difficulty being only how to choose. If some should be inclined to believe that the solution of the problem was facilitated by the employment of certain types seen here, and imported from countries older in cultured ways, we should have no difficulty in pointing out whence originated the models upon which they worked. In their distant migrations and adventurous expeditions in the eastern basin of the Mediterranean, Achæan and other tribes closely related to them landed more than once on Egyptian and Syrian shores, where the dash of their bands spent itself against the fortress-walls which they there These, we know from the wall-paintings of the encountered. Eighteenth and Nineteenth Dynasty, were all furnished with crenelations.1 Embattled edges, first as defence, then as ornament, played an equally important part in Phœnician buildings; 2 it was the same for thousands of years throughout Anterior Asia. We are aware that Assyrian bas-beliefs, wherein are figured countless sieges and places taken by storm, are later in time than the citadels of Argolis, and that Assyria invented nothing. In her civil and military architecture she did little more than apply the methods she had inherited from Chaldæa, where embattlements had been popular at an early date, owing, as we have shown, to the ease and rapidity with which battlements can be constructed in a brick wall.8

Whether the form in question was suggested from with-



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out, crenelations about Mycenian walls could not be exactly on the same lines as those beheld in the strongholds of Egypt and Western Asia. Rain is less prevalent in those countries than in Greece; besides, brick baked in the kiln was among the properties of Chaldæa and Egypt from time immemorial, the resisting power of which against the elements is infinitely greater than brick dried in the sun. It often rains in Argolis. Hence

Fig. 294.—Restoration of Tirynthian crenelations. Old Messenian crenelations,

the need may have been felt of protecting, by means of a horizontal slab placed upon the clay squares, both the void between each pair of battlements and the head of the merlon. We are inclined to attribute the origin of the peculiar arrangements which we meet in certain crenelations of the historic age to climatic exigencies. Fig. 294 shows the juxtaposition of the Tirynthian battlements, as conjecturally restored by us, with

Messenian crenelations; remains of the latter have been found at the foot of that fortified and splendid enclosure, the masterpiece of Greek engineering in the fourth century B.C.¹ Without this precious relic the presence of a covering slab for each merlon would have been hard to explain. The merlon, being a stone block, had no need of a covering slab, the effect of which was to narrow the width of the embrasure, the sides of which caught the shoulders of the combatants and hindered their movements. The difficulty, however, disappears as soon as we look upon it as a survival, or traditional preservation, of an arrangement which had once been found useful, and was apparently retained, not for reasons of necessity, but because the workman's hand and the eye of the spectator alike were accustomed to it by long usage.

Whether battlements were rough and irregular or not was of little consequence. Their great advantage was this: their construction involved very little expenditure of time and labour, and wherever the nature of the ground formed no barrier to the enemy's approach, they could be run up and placed on the curtain within a few hours. It may well be that on naturally well-guarded spots, the southern front of the Mycenian enclosure for instance, where the escarp of the rock sufficed to keep off the enemy from the wall, embattlements were dispensed with as superfluous. Per contra, on the most exposed points, in the proximity of the gates, a simple parapet would have been inadequate; here the combatants felt the need of a more efficacious protection against missiles, and the want was met with those platforms, the timbers of which, devoured by the flame, have left ashes round about, and calcined the stone and brick in their immediate neighbourhood, both at Troy and Tiryns. Reference to Pl. VIII. will show how varied were the shapes which these shelters might assume. The closed niches in question, with window-like openings, though affording excellent protection to the defenders, were poor places wherefrom to discharge missiles with telling effect against the foe. In a supreme struggle they were content with such shelter as a wide projecting roof and pillars at the corners of the walls were able to supply. Merlon, roof, and pillar arrested many a murderous dart; whilst the combatants had not only more elbow-room, but could repulse the attack in every direction.

¹ Expédition de Morée.

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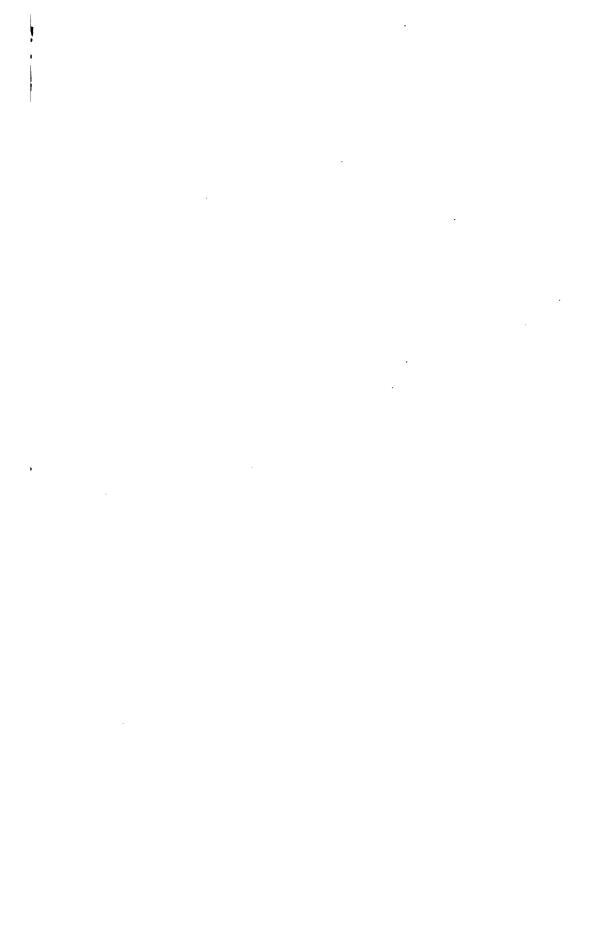
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The reader must beware of taking for towers certain appearances in our views of Tiryns and Mycenæ (Pls. VIII., IX., X.), for he must remember that the military architecture of that period is as yet unacquainted with towers strictly so called. These are works which, though hollow and quite independent, have a more or less marked salience on the external and sometimes internal face of the circuit-wall, with which they are connected at the sides. The like peculiarities are absent here. The enclosure presents salient resaults; but oftener than not they appear to be due to the contour of the cliff, which in places juts out into a species of promontories. Such saliences are of unequal length and irregularly spaced; whilst their mass is solid, like the remainder of the curtain. This was not the spot chosen by the builder for contriving chambers in the thickness of the wall. At most, we find stores or cisterns in the foundations of a rectangular work, standing out about eight metres from the wall, towards the south-west angle of the castle (Pl. II. A A.). This structure is the nearest approach, along the entire perimeter of the enclosure, to what we call towers. Nor should the name be applied to an enormous round bastion westward, with a postern, against which leant the steps that led to the palace (Pl. II. T). The gates belonging to the first period of the burnt city at Troy jut far out in front of the enclosure. arrangement was intentional, and served to diminish the slope of the covered passage, flanked by thick walls, and topped by a broad platform which led up to the castle, having a salience on plan, and perhaps also in elevation, beyond the curtain, whence the approaches to the gate could be watched and kept clear (Pl. I. FL, FN). Thus, Homer shows us Priam and the Trojan elders seated on the Scæan Gates, looking on at what is doing in the plain, and Helen, who presently joins them, is said to be "walking towards the tower." We cannot, however, without a strange abuse of the meaning the words convey, apply the term of tower to a structure, no matter its amplitude, which is but a fortified gate, a shell, in the middle of which a passage has been pierced. Whereas the rectangular masses which project beyond the south-eastern front of the rampart of the burnt city may be recognized as the first outline of towers (Pl. I. BA, BC, BD), and used doubtless by the defence to keep the enemy at

bay, and take him, as he neared the foot of the wall, between what we now should call two fires.

What most resembles a tower at Mycenæ is a kind of spur, having a bold projection beyond the rampart in front of the Lions Gate, towards the right (Fig. 90 and Pl. X.). Here the building of the masonry, arranged in horizontal courses, is more regular than on any other spot of the enclosure, and must have been constructed at the same time as the monumental entrance whose approaches it covers. We think that both wall and gate are coeval with the final re-building and enlargement of the slab-circle, when this part of the fortress was endowed with the appearance which it retained to the last. A less salient spur of the same nature protected the north-eastern postern (Fig. 90, B, and Pl. X.). There were certainly platforms on the top of the pair of projections, which served as places of arms; we have supposed that they were provided with a roof like those on the corresponding plateaux of the Tirynthian wall. The Mycenian enclosure exhibits no other saliences but these; flanking does not seem to have been made use of here, if exception be made for such points as are near the gates; whereas its principle seems to have been dimly perceived at Troy and Tiryns. This might not unreasonably be taken as denoting that, despite certain appearances, the body of the Mycenian circuit is not much vounger than the wall of Tiryns. The fact that the Tirynthian fortifications never underwent any rehandlings, that they are constructed with materials of great size, and belong to the first system of Cyclopæan masonry, is apt to give a false impression. If the stones composing the Mycenian rampart are smaller, that may have been due to the greater distance which separated the quarry from the works. If the parts of the rampart at Mycenæ which attract the attention of the visitor have a less archaic appearance than the Tirynthian walls, it is because the Mycenian citadel was enlarged and rebuilt several times. These differences in the style of building are shown with absolute exactness in our Pls. IX. and X., made up from photographs and information furnished by Steffen. They are too distinct to be explained otherwise than by successive reconstructions. this denomination should be noticed a well-jointed polygonal masonry extending over a large surface, seen in Pl. IX.,

¹ Steffen, Karten.



right of the spur which conceals the Lions Gate, and again in Pl. X., and also at the opposite end of the visible front of the enclosure, towards the eastern point, where it describes a triangle.

What, in despite of this difference, permits us to class Mycenæ and Tiryns together, is the fact that in both citadels we see the application of a rule which the Greek engineer will retain to the last days of antiquity; namely, to arrange the approaches to all the gates along the circuit in such a way as to oblige the assailant to present his right side—i.e. that which was uncovered by the shield—for the arm, having to handle the bow or javelin, left that part of the body exposed to the missiles of the defenders stationed on the wall. There was nothing for it, either at Tiryns or Mycenæ, but to present the "naked" side whilst ascending the gently-inclined ramp which led to the main entrance, or whilst skirting the projection, in length fifteen metres, in front of the Lions Gate. The advantage derived by the defence from this arrangement was enormous, the difficulties and dangers of the attack were greatly increased thereby, whilst it compelled the besieger to offer battle under unfavourable conditions.

Nothing of the sort has been found at Troy, not even in the last stage of the enclosure. Their wits had not yet been sharpened up to the point of playing such a disagreeable trick on the foe, obliging him to turn a work he wished to storm under the volleys of the garrison. A glance at the gates of the third epoch (Pl. I. FM, FO) will show that the ramp by which one of the entrances is approached is perpendicular to the line of the rampart FM; the hostile force mounting that path does not come within the range of the shots of the garrison until it faces the obstacle about to be carried. It is the same with the other gate, Fo. The art, then, of construction and fortification has made considerable advance from Troy to Tiryns and Mycenæ. Narrow posterns or back entrances, hidden away in the thickness of the wall, occur in the three citadels. These, at Troy and Tiryns, are reproduced in Figs. 45 and 79. At Mycenæ this function seems to have been fulfilled by two passages which traversed the rampart, and ran through the eastern recess of the castle (Fig. 90, NN). At Troy, the enemy's advance and his attempts to force the passages were checked by double gates.

If he succeeded in breaking down the first, he found himself in the inner chamber of the structure, with a second barrier in front of him. The Argolic citadels were similarly planned. Thus at Tiryns, the enemy, after successfully scaling the ramp (Pl. II. $\Delta \Delta$) and crossing the narrow corridor pierced in the eastern wall, was far from being master of the situation; he had to continue his march between two walls, from the top of which missiles were rained down upon him; at the end of which he would come against a heavy gate, and find himself caught as in a trap, for the doors, being firmly fixed to huge stone uprights, could not be easily forced. The Lions Gate, which was closed by folding-doors, was apparently followed, four metres fifty centi-

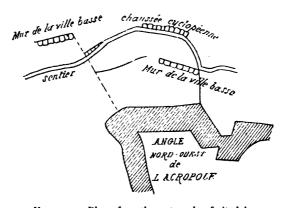


Fig. 295.—Plan of north-west angle of citadel.

metres in its rear, by a second gate, pierced in a wall of no great depth, the foundations of which alone remain. When these works had been carried, the invader debouched on an esplanade bounded southward by the sacred precinct, overhung on the right by the circuit and on the left by a Cyclopæan wall, which supported the lower esplanade of the upper city, thickly studded with habitations. Behind the north-eastern postern, B, there is a wall which runs parallel to the circuit for about thirty metres, leaving a narrow space between it and the boundary wall, where the invader who had obtained a first success on that side would be exposed to the missiles of the garrison posted on the summit of the double rampart.

If the principal entrance at Mycenæ was planned on a more simple system than at Tiryns, it may have been because it was

felt that the buildings of the lower city and the boundary wall afforded sufficient protection for it. The wall, for the most part, has gone; but two pieces of it are extant at one of the extremities, in front of the north-west corner of the castle (Fig. 295); though much thinner than the citadel rampart, it is none the less constructed in Cyclopæan style. According to Steffen, the meeting of the boundary wall and the inner enclosure occurred somewhere at that point. In Pl. X. the junction in question is seen almost on the first plane, to the right. We have likewise followed his instructions for the westward curve made by the city wall, some seventy metres or thereabouts in front of the Lions Gate, so that it formed on this side a first line of defence of no inconsiderable strength.

Fronting the north side of the enclosure we have, in this same perspective view, the foundations of a causeway which from the valley of Cephisus and the lower city led to the spring of the Perseia, and the small plateau which interposes between the heights of Haghios Ilias and the Zara. The edifices planted on the summit of the acropolis are seen sideways; this was done for the sake of showing the powerful mass of Cyclopæan masonry, which not only served to make good the steepness of the slope on that side, but constituted the esplanade whereon stood the palace. But in the western view (Pl. IX.), if the Lions Gate, masked by the salience of the spur covering it, is not visible, we obtain a front view of the palace block of buildings commanding the edifices staged on the slope. The houses shown in these two drawings are put there on Steffen's authority and the result of subsequent researches, in the course of which their remains and substructures were uncovered. Thus, the state of the ground (Pl. X.) indicates that the abrupt sides turned to the Kokoretza ravine had but very few dwellings; whilst both on the gentle declivities to the westward, which face the castle gate, and towards the Treasury of Atreus (Pl. IX.), they muster stronger. We have enclosed them within walls of dry stones placed there, like those of many a modern Greek village, to prevent animals from straying away when not pasturing. The stones that everywhere strew the ground must to a great extent come from these ancient low walls. But for the fear of over-crowding the foreground of the picture and concealing, on

the right, the boundary wall, we could have put many more rustic dwellings, along with their stone fences. As regards the acropolis, however, our aim has been to convey a just notion of the way in which houses were staged on the declivity where, in the space intervening between the palace and the gate, they were serried against one another.

Ere the authority of the Mycenian princes was firmly established, such families as had cast in their lot with these chiefs must have been anxious to domicile themselves in that narrow space, in order that they might have the full benefit of the protection afforded by the formidable rampart. Northward of the citadel, one may still pick one's way up a narrow street, bordered on either side by the front walls of ancient houses, still one or two metres high. The lane is but one metre twenty centimetres broad.1 A subterranean conduit was laid down for draining off the waters, and continued right through the rampart, to prevent floodings. The slope, within the citadel, is throughout pretty steep; at certain points a flight of steps, thirty-two of which are in position, served to connect the several habitations (they are marked in Fig. 90, right of the house E). Survey of the ground does not tend to make one understand how Homer could rightly apply the epithet of εὐρυάγυια, "large streeted," to Mycenæ.² In order to grasp it, a distinction must be made between the lower and the upper city. Here the course of a path, cir. five metres broad, has apparently been recognized; it ran above the wall bounding the sacred precinct on the west, and after a long curve reached the foot of the stairs by which the palace was approached; 3 yet the threshold of the Lions Gate bears no trace of chariot wheels. Hence Homer's allusion to the broad streets of Mycenæ must be understood to refer to the causeways which, established on Cyclopæan foundations, intersected the lower city, and placed it in communication with the outlying plain, as well as with Cleonæ, Nemæa, Sicyonæ, Corinth, and Epidaurus. One of these, according to Steffen's measurements, is three metres fifty-eight centimetres broad.4 In order to make the details to which attention has been drawn in the foregoing pages easily understood, we have supposed that our

¹ Tsoundas.

² Iliad.

³ TSOUNDAS, Μυκήναι καὶ μυκηναίος πολιτισμός.

⁴ Steffen, Karten.

views were taken close to the castle; the imagination can alone —taking in the general view of the city as it appears to the spectator, who should stand on the rising ground of the right bank of the Cephisus—conjure up here the whole panorama which would unroll before him, and which, for reasons of space, we have imperfectly figured. His attention would first be drawn to those detached forts frowning from the summits of precipitous ravines, or placed at the outlets of defiles to guard the approaches to the valley; then he would follow the broad firm outline of massive causeways, leading to the royal borough, and built, like the bridges thrown athwart tearing torrents, for eternity; whilst in the middle distance, beyond the river, his eye would dwell pleasantly on fields and orchards, mayhap, then as now, on clustering olives; and farther on, spread out leisurely amidst gardens and terraced walks, he would note the houses of a vast suburb, whose site is now occupied by the village of Charvati, and the more compact groups of habitations enclosed by the external enclosure; finally, in the distance, great pieces of embattled ramparts encircling the acropolis would break the line of grand and lofty ridges, at that time finely timbered.1 Behind this stony zone, a pyramid-like pile of structures was soldered on to the rock, the peak itself being crowned with the imposing mass of the palace erections. At that period, there probably was no spot washed by the Ægean which, from the multitude of men dwelling within its walls, the amplitude of the edifices, and length of line of the fortified enclosure, could challenge comparison with the Mycenæ Minyan Orchomenos may not perhaps have been of the Atridæ. wanting in a certain massive grandeur, which in some respects approached to this, but we cannot gauge its importance on the sole testimony of tradition, or picture to ourselves the outward appearance of the town from a unique building confessedly much weathered.

If we are to believe the tale of the Arcadians, there are older remains than those of Mycenæ and Tiryns, and they should be sought at Lycosura, situated on the southern slopes of Mount Lycæum, of which Pausanias writes: "A little higher is seen

¹ Indirect proof that the country was covered with forests in antiquity is furnished by the presence of boars' teeth, found in great profusion in these graves. The animal, as is well known, thrives and multiplies only when sheltered by thick undergrowth (Tsoundas, Μυκῆναι).

the enclosure of ruinous Lycosura, now reduced to an exceedingly small number of inhabitants. This city is the oldest known, either on the continent or in the islands. It was the first whose construction Helios witnessed, and from it men learnt to build other towns." In despite of this emphatic statement, the ruins, whatever their real age may be, do not impress an observant eye as leading back to hoary antiquity. The oblong and fairly regular stones composing the wall are of medium size. They are not dressed to a very even front, but the courses exhibit a decided tendency to horizontal beds.² If the work cannot compare with the Hellenic masonry of the Messenian or Eleutherian walls, neither does it betray the rude power and massiveness of the Argolic acropoles. The defences of Lycosura, then, are unique in their way, a fact that would make for the myth according to which Lycian workmen helped the Perseidæ to erect the walls of their fastnesses. In this way the originality which is displayed in these structures would be accounted for on the basis of Oriental influences both marked and continuous, observable on the hospitable shores of the Argolic bay; except that we are met on the threshold by the difficulty of accounting why the Mycenian and Tirynthian defensive works exhibit none of the features by which those of the districts where the myth places their models are distinguished. Nevertheless, if there be structures that almost appear beyond the reach of injury which man or the weather may wreak upon them, it is assuredly ramparts like these, whose materials it would have been inexpedient to displace at any time. Had the prototypes of the enclosures described and figured above ever existed in Lycia, they would be there still.

Our difficulties are equally great in viewing these citadels, as some have proposed to do, as Phœnician work. Phœnicians have

¹ Pausanias.

² Dodwell was the first to point out these ruins (Tour through Grecce). In Views and Descriptions of Cyclopean or Pelasgic Remains, &c., will be found a general view of the acropolis, but on too reduced a scale to allow us to judge of the dimensions of the materials. Both there and in the narrative, Dodwell compares this circuit-wall to that of Tiryns, but in a vague, loose sort of fashion which passed muster in the thirties. I myself examined the ruins of Lycosura, and was particularly struck with the difference of construction in the two sets of structures. My notes, taken on the spot, coincide with Bursian's testimony de visu, who describes these ruins.

doubtless shown a marked preference for materials of enormous size; but nothing has been found in Phœnicia which can fairly be compared with Tiryns, nor are monumental lacunæ supplemented by literary data. True, a certain resemblance is observable between the chambers contrived in the thickness of the walls of Tiryns (Fig. 76) and the niches, cisterns, stores, or casemates for the necessities of the garrison which pervade the existing ramparts of Carthage; but the resemblance, in our opinion, is fortuitous. To meet identical needs, the builders of either country elaborated plans that present real and unmistakable analogies; the construction, however, is so widely different from one enclosure to another, as to render the presumption of a first and common model untenable; whilst our knowledge of the habits of the Phœnicians, and the nature of their dealings with the primitive tribes of Hellas, permit us to discard the hypothesis under notice. Thousands of hands, curbed by long obedience to the will of a master, whose wish was law, were required to build these fortified enclosures. Would Syrian traffickers, whom Homer and Herodotus represent as unburdening their ships on the sea-shore, have been able to carry on such works as these in the teeth of hostile tribes entrenched on the heights which bound the plain of Argos at every point of the compass? If ever they tried to establish a fortified factory in these regions, it must have been at the extreme point of Nauplia, within sight of the plain, and at the foot of the cape, where they were sure of a safe anchorage. The same drawback, in an aggravated form, existed at Mycenæ; not only had the town no outlook upon the sea, but it had none of the features which characterize the trading settlements of Phœnicia. is an inland and mountain city, the dominant idea of whose rulers was to establish their supremacy on the land stretching from their city gates to the Corinthian Gulf, as is abundantly proved by the many tracks, fenced by walls and towers, which form a perfect network. Moreover, the distinctive peculiarities of the Tirynthian palace, with walls which merge in the defences, both in plan and decoration bear the impress of a civilization far removed from Asiatic cultures. As to the Mycenian edifices and the ramparts, we feel, notably in the rebuildings these underwent and the marked progress they evince, that they were due to a

local art, which during a long life had here its being and organic development.

It may be argued that although the Phœnicians never owned these acropoles, they yet furnished skilful Giblite masons to the chiefs who had them built, as they did to Solomon when he raised a temple to Iahveh at Jerusalem.¹ The presumption. however, is traversed by the significant fact that there are positively no data, either historical or mythical, which would point to such close relations having existed between the Achæan chiefs of Peloponnesus and the Syrian kings. Mycenian Hellas had doubtless already brought together the elements of the style which characterize her plastic art, ere Sidonian barques began to frequent the bays and sounds of the Hellenic peninsula. What is there against the acceptance of a simpler explanation? The so-called Cyclopæan style of construction belongs to and is the monopoly of no particular race or people, but is rather what may be termed a human phenomenon. We find this same style of masonry pervading the walls of lands where the native rock breccia, schist, or limestone—lends itself to be easily cut into slabs requiring little or no dressing, or into great blocks piled upon one another. Should we wonder to find such walls both in Italy, Greece, and elsewhere, outside the boundaries of the ancient world, where in this or that country they assume an exceptional appearance of massive grandeur, which is due to the nature of the materials or the bolder spirit of the chiefs of particular tribes? This was the case in Argolis, where dynasties. served by the configuration of the ground, had no difficulty in selecting appropriate sites for their strongholds; whilst, what with the quality of the stone at hand and the abundant resources which were denied to their rivals, they built in this system, and with simple methods raised bulwarks whose stupendous mass excites the wonder of an age possessed of better appliances and greater technical skill. The best work of this primitive architecture was produced in Argolis, where singularly favourable conditions worked together to bring about this happy result; in the same way as Athens will presently furnish the noblest examples of classic art. The excavations, in clearing ramparts and palaces which had hitherto eluded our researches, have shown and will show at no distant date, perhaps, that during

the whole Mycenian period, other parts of Hellas were provided with fortified enclosures and princely habitations, whose points of difference from the typical specimens resided in less massive and lofty ramparts, and a simpler decorative scheme.

The House and the Palace.

The houses that fill our views of Tiryns and Mycenæ are for the most part covered with flat roofs. Our arrangement, however, by no means implies that primitive Greece was unacquainted with the use of a double or fourfold inclined covering. A sloping roof is the natural shelter of a clay or a timbered hut, which latter we find in hilly districts where wood is plentiful. Between the roof and the joisted ceiling of the room there is left an empty space which is utilized as granary for stowing away winter forage, firewood, and family provisions. The Swiss cottage shows us the type in its full-grown stage; but it is represented in every country where favourable conditions unite to bring it into existence. Hence we cannot doubt but that certain Greek cantons had ridged roofs like those of Magna-Phrygia and Lycia, where climatic conditions, and consequently building materials, were practically the same as those of Hellas.1 If these rustic dwellings disappeared along with the wood-cutters and shepherds who built them, their remembrance was preserved in Greece and elsewhere in more abiding structures. the chamber at Spata, and that of several rock-cut tombs at Mycenæ, is provided with a double sloped roof like that of a house.2 The only moulding in either locality is a groove sunk towards the top of the wall, at the point of junction between it and the inclined plane of the roof, as well as at the sides of the chamber, where it recalls the angle made by the meeting of the oblique joists and the vertical plane of the hut. We recognize this primitive hovel in a terra-cotta ossuary which forms one of a class yielded by certain tombs in Crete (Fig. 296).8 The roof

¹ On the wooden huts of Phrygia, see *History of Art*; on the stones of Lycia, *ibid*. The Phrygian graves in the vicinity of Midas' Tomb are all copies in stone of wooden houses with double sloping roof.

² See ante, Vol. I. p. 364, Fig. 126.

³ G. Orsi, Urne funebri Cretesi. See ante, Vol. I. p. 437.

is rectangular on plan, and sloped on its four faces; it terminates at the top in a stout beam, the Homeric $\mu\epsilon\sigma\delta\delta\mu\eta$, with wide projection at either end.¹ These peculiarities are even more marked in a Phrygian cottage which we know of old.² There,

F16. 296 -Terra-cotta ossuary. Total height, o m., 74; length, o m., 96.

however, imitation is not carried into every detail, as in those funerary urns of terra-cotta that have come from the necropoles of Mount Albano, in Italy, and certain Etruscan cemeteries. In these, as in a very similar specimen from a neighbouring tomb, the shape we are considering is curiously reproduced

¹ Odyssev.

with all its minutiæ.¹ So too, the temple, when reduced to its essential elements, is no more than the primitive hut, furnished with a loft, a pair of gutters, and gable ends. Homer seems to have had the type in his mind's eye when he describes two wrestlers who hold fast by the top beams of the house, "put there by the skilful hand of the carpenter, and which defy the violence of the wind."² That the luxurious habitation of Circe terminated in a flat roof is proved by the accident which befell Elpenor, who, after a dinner during which the loving-cup had freely gone round, falls asleep on the roof, and being suddenly awakened by his carousing friends, forgets where he is, falls from the roof, and is killed.³

It is, then, not at all unlikely that around the citadel of Tiryns and Mycenæ there may have been huts with triangular roofs inhabited by slaves or peasants. But as our pictures could only contain a very small number of houses, we have chosen the domestic abode represented by foundations which the excavators of the prehistoric cities of Argolis have cleared, and whose elevations they have divined.4 Flat and ridged roofs are the two systems which, according to localities, prevail in modern Greece. The former are popular in the islands; whilst on the continent sloped roofs are the rule. Villages and towns, where some thirtythree years ago I often used the top of the house as a rough shake-down, I found provided with ridged coverings in 1890. If sloped roofs tend to become more and more popular, it is owing to the facility of procuring tiles almost everywhere in Greece at the present day. The Mycenian builder lacked this resource; he was as yet unacquainted with bricks baked in the kiln, and, as a matter of course, with tiles which require more skilful manipulation. Nor have schistose slabs as house-covering-which in certain localities preceded the employment of tiles—been found among the ruins. Thatch, whether of straw or bulrushes, was unsuitable for spacious and complicated edifices such as the Tirynthian and Mycenian palaces. For this kind of roof a very deep incline is necessary, to drain off the water and prevent its

¹ G. ORSI, Urne funebri Cretesi.

² Iliad. The booth which the Myrmidons ran up for Achylles before Troy was in all likelihood shaped something as the above. Like it, it consisted of thickly-stacked pine-branches and rushes.

³ Odyssey. 4 Dörpfeld, Tiryns.

dallying among the straw. Thatch does very well for isolated structures, but would be found most inconvenient in contiguous blocks of buildings extending over a large area. To cover a whole pile with a deeply-inclined ridged roof would involve abnormal height.

A scarcely more happy note would have been sounded in giving a separate roof to each section of the unit; for not only would the sloping lines of the lofts cross each other at more than one point, but the gutter of the higher covering would discharge itself with dire effect on the neighbouring and lower roof. Even supposing that such a serious drawback had been satisfactorily met, where could suitable material—i.e. sufficiently water-tight—have been found to be placed at the meeting-points of any two sides? Flat roofs did not suffer from the same disadvantage; the gentle incline of their surfaces allowed the waters to be slowly drained off, and with a little management they could be conducted from the higher to the lower roofs and on to the ground, without having caused too much damage on the way.

Discarding the hypothesis of deeply-inclined thatched coverings, at any rate for important edifices, we are left with flat roofs of clay only. These, unless it is wished to see them carried off by the first heavy shower, should be nearly horizontal. Huge rugged slabs, or clots of mortar, composed of clay, pebbles, and lime, have been collected in several rooms of the palace at Mycenæ. They average six centimetres in thickness; the traces left by the stalks of bulrushes on one of their sides give us a clue relating to the ingredients that made up the house-covering. These consisted of rushes closely stacked over the joists of the ceiling, followed by a layer of mortar. It may well be that in poorer houses they managed as best they could with clay and chopped straw alone. The superficial layer of earth was levelled out with a roller after the rain. To this end the shafts of ancient columns have been utilized for centuries, and still are so utilized in Eastern regions.

Although we have set up flat roofs almost everywhere, the employment of which seems to be demonstrated, at any rate for the principal edifices, we have tried to infuse a little variety in their outward appearance. The citadel shows houses with an upper storey (Pl. IX.), having traces of steps which led to the

I



upper rooms.1 The more important abodes, whose number was necessarily small, must have had a second storey. Most of the houses which have been uncovered and examined during the excavations of 1890 2 belonged to a very simple type; they have no openings on any of their faces, and their foundations—the only existing portion—are built with small stones in Cyclopæan style. The chamber or chambers occupied by the family were enclosed by clay or rubble walls, probably overlaid with plaster. The apartment, some two metres above ground, was approached by an external flight of steps, in all likelihood sheltered then as now by a pent-house (Fig. 117). Below these apartments were dark chambers or cellars that served as stores; they were entered by an inner trap and some descending steps.3 Such houses were for the masses. They consisted of but one or two rooms, and must often have been made of wood; no trace whatever of decoration has been found in them. Edifices with all the principal apartments on the ground-floor are the only type presenting any interest. Their first outline occurs in the chief building of the burnt city at Troy (Pl. I. A, and Fig. 48), as well as in a structure of the third settlement (Fig. 59). We also find it in a somewhat more elaborate form in a house which M. Tsoundas excavated in 1886 at Mycenæ, close to the south-west wall of the acropolis (Fig. 90, E, and Fig. 114), and again in the remains of two buildings where the type has assumed its full development, the one occupies the whole area of the upper Tirynthian citadel, and the other crowns the summit of the Mycenian rock. Who doubts but that these edifices served as abodes to the tribal chiefs whose political centre and refuge in troublous times were at Tiryns and Mycenæ; they are the early representatives of the modern konak or seraglio. For convenience' sake we have given the name of palace to these buildings; the title, if somewhat ambitious and scarcely correct, has the merit of being understood by all.

We must begin our work by closely examining the groundplan. When it happens to be as clearly indicated on the soil as we find it here, we get many an interesting data in regard to

¹ See ante, Vol. I. p. 335, Figs. 114-116. ² See ante, Vol. I. pp. 337, 338.

³ Something akin to it must have obtained in Homer's time; for whenever mention is made in the *Odyssey* of a person going into the apartment where provisions of all sorts were kept, the word καταβαίνειν is employed.

the outward appearance in elevation presented by the buildings we have to restore. We have five, or, to narrow the field of our inquiry, three plans to take into consideration from which to obtain gleanings to help to define the palace of the Mycenian age. The erection of the third village at Hissarlik may have been a temple, for it has no lateral buildings. As to the edifice of the lower city at Mycenæ, it is but a reduced copy of the ampler and richer abode on the acropolis; the latter, seated on a lofty terrace, commanded all the other buildings, and was led up to by a broad staircase, which testified to the importance of the princely residence (Fig. 297). The plans under notice have many characteristics in common. For one thing, all these enclosures lacked space; hence the palace was hemmed in by other structures at every point of the compass. It formed a separate block, enclosed by thick walls and massive gates; nevertheless, it was far removed from and lagged behind those vast edifices that will be erected by and by in a more advanced stage, when, despite the extent of the ground they cover, they will yet make up a compact and perfect whole comparable to the grand periods of a Demosthenes or a Bossuet, wherein subordinate ideas are so deftly grouped around the principal one, as to hang together notwithstanding their length. The architect had not yet learned how to bind together the several parts of the unit which he strove hard to bring into existence, and treat them as members of the same body. The palace was constituted by a group of buildings unconnected with one another. Each apartment of any importance was separated from its fellow by an empty space or alley. Partition-walls are non-existent at Troy (Fig. 48) or Mycenæ (Fig. 116); some examples do indeed crop up at Tiryns (Pl. II.), but only in the smaller chambers. Rooms of great size are all, without exception, surrounded by passages; with this difference, that at Troy and Mycenæ, the space parting the single structures is too narrow to allow a man to get through, whilst at Tiryns they are covered and commodious passages designed for free circulation.

At Troy, a notable portion of the buildings was destroyed by the deep trench which Schliemann recklessly cut right through the hill (Pl. I.), during his first excavations, whilst at Mycenæ a landslip carried off the end wall of the structure on the southern side, where the cliff, being very precipitous, was made

good by a deep layer of silted-up earth and rubbish on which they afterwards laid the foundations of a Doric temple (Fig. 116). Tiryns alone has preserved a complete plan, which requires no additions to be made, save here and there some pieces of wall whose course may be traced with certainty from the existing parts (Pl. II.). The distinguishing features of the three plans are, first a great hall, the largest in the building, whose breadth is in every instance cir. ten metres; whilst the length varies from ten metres at Tiryns to twenty metres at Troy; 1 so that the length of the Trojan hall is double its breadth; but the difference between width and length, though marked, is much less at Tiryns, and hardly perceptible at Mycenæ; here, the first impression gained is that of a square room. All these halls are preceded by a vestibule, which is single at Troy, and double at Tiryns and Mycenæ. In the two last edifices it decomposes itself into a portico (αίθουσα δόμου), which opens in front on the court, and a covered and closed ante-chamber, which interposes between the porch $(\pi \rho \delta \delta o \mu o g)$ and the principal apartment; this in either instance has no direct communication with the outside. It is not hard to guess at the part which the hall played in the existence of the inhabitants of the fort, and the needs it was intended to meet. Everything was calculated to afford accommodation for a large number of people, and facilitate movement to and fro. The entrances, of which there are three at Tiryns, are all very wide; they stand between the portico and the inner vestibule (Fig. 83). The porch and vestibule served as waiting-rooms to such visitors as were precluded by their inferior rank or functions from passing to the reserved part of the building without previous leave. Such would be clients and persons soliciting favours, who had to wait for their turn to be received in audience. Here, too, were servitors, when their presence was not required elsewhere. The hall had no door, the entrance being closed by a simple curtain, which generally was drawn on one side. We recognize in it the Homeric megaron, be it from its dimensions or the

¹ The exact dimensions of the megaron are as follows: At Troy (Pl. I. A) twenty metres by ten centimetres, and (Fig. 59) eleven metres fifty-five centimetres by nine metres ten centimetres; at Mycenæ, twelve metres ninety-two centimetres by eleven metres fifty centimetres (Fig. 116); at Tiryns, eleven metres eighty-one centimetres by nine metres eighty-one centimetres.

ordinance of its approaches; its name is clearly derived from the word $\mu \not\in \gamma \alpha \varsigma$, large, enormous. The heads of the great families, anactæ, were wont to assemble in this room, whether in Corcyra or Ithaca, and spend the day in converse and jollity, enjoying the pleasure, dear to Hellenes, of talking, discussing, or listening to the minstrels' tales of adventure or the thrilling narratives of experienced voyagers. Nowhere is the importance of the megaron better seen than in the plan of Tiryns.\(^1\) The orientation of the great halls should be noticed; none open on the north. The Trojan megaron faces south-east; it is turned to the south at Tiryns, and to the west at Mycenæ.

We have entered at full length upon the materials and processes employed in the construction of these edifices, the walls of which were composed of ashlar stones, crude brick, and wooden ties.2 At Mycenæ the rough masonry is faced in places by slabs alternating with timbers (Fig. 175); these are left exposed, so that the decorator could utilize them as he pleased. The Tirynthian ornamentist, on the contrary, had no resource except colour to veil the unlovely appearance of his walls; this he did by first overlaying them with stucco. It is the same with the columns. The part they play in the buildings we have restored needs no further justification. The stone bases found in situ at Tiryns and Mycenæ can only have supported wooden pillars.3 We know the dimensions, on plan, and the position of these missing columns; we are aware of the very peculiar entasis which the Mycenian architect invariably gave to his shafts, and the members that went to the making of his capitals. In defining these supports, we said how they formed porticoes on the sides of the courts and front of the megaron, and how in the latter they supported the loft; that if the mode of covering the house might be open to question, there was no doubt as to Mycenian Hellas having had hypostyle halls.

From Dr. Dörpfeld's plans and drawings we obtain the situation of the doors (Pl. II. and Fig. 116), whilst their exact breadth is given with no less certainty by the space left between the stone blocks which served as plinths to the wooden uprights. The arrangement which Vitruvius calls in antis and prostyle is found at the entrance of all the megarons; it crops up again in many Greek temples (Fig. 84). This, one of the most distinctive ¹ See ante, Vol. I. pp. 280, 281. ² See ante, ch. iv. § 1, 2. ³ See ante, ch. iv. § 3, b.

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Fig. 298.—Mycenz palace. First epoch. Elevation of the façade of the megaron.

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peculiarities of the plan we are considering, has absolutely no exception.¹ We do not by any means pretend to lead back to the beginnings of this architecture, but in the presentation of the palace we may assume that it has already passed through several stages; though still primitive, our image is well ordered, and not destitute of the fairness which comes of ornament; it is simpler, nevertheless, than it will ultimately be when the art which brought it into being shall hold in its grasp all its resources. Fig. 298 shows the palace in this intermediate phase of its growth.

We begin by setting up the columns on the bases that are still fixed to the soil. Their intercolumnation, and the space from each to the anta which covers the head of the wall on either side, are ascertained by the existing stone blocks, on which rested the antæ (Fig. 84). On a plane with these are traces of other buildings. Accordingly, we may reasonably suppose that the middle part of the façade, comprised within the antæ, behind which stood the reception or gala hall, was given greater height than the lateral and subordinate apartments, destined for private uses. Then, too, drainage had been duly considered, and a satisfactory result obtained by a system of terraces built at different levels. this fashion the gutters of the upper esplanades discharged the waters on those underneath until they reached the soil below. The slimness we have given to our column is in strict accordance with the proportion of the diameter to the height observable in the semi-columns of the sepulchral façades. Here, as in Tomb I., the shaft has about eleven diameters and a half. The pillar, which is wooden, consists of a single or several pieces joined together; and being timbered, is naturally more slender than a stone support. Timbered antæ rested, either directly on stone bases as at Troy (Fig. 187), or as here, in wooden sleepers fixed by pegs to the supporting blocks. Reference has already been made to the house covering, and why it should be a flat roof.2 The simplest mode of building a loft is to place the architrave, made up, horizontally, of two or three parallel beams, on the columns and the heads of the wall which it traverses (Fig. 299). The architrave has a bold salience at either extremity of the façade, and supports a kind of cornice which discharged the waters at some

¹ See ante, Vol. I. ch. iv. § 3, a.

² We think that Prof. Middleton was mistaken in giving to his restored megaron a double sloping roof.

distance, and prevented injury to the side-walls. We learn from the bas-relief over the Lions Gate (Pl. XIV.), and the decoration of one of the Mycenian tombs (Fig. 286), that the ceiling which supports this triple architrave is composed of round joists, closely packed together, like the corresponding timbers of Lycian architecture. The pair of square beams which form the returning angle at the sides enframe the joists and prevent displace-



Fig. 299.—The Mycenian palace. Second epoch. Partial longitudinal section through vestibule.

ment; the heads of the round pieces form, above and beyond the joists, a continuous series of juxtaposed discs. On these roundels, again, is placed a second joisted floor or ceiling, the component parts of which intersect the longitudinal timbers (Fig. 300). Finally, crowning the entablature, is a raised plate, protected by a thin metal cuirass, which serves to keep the clay mattress in place.

The decoration, in this style of building, is exceedingly simple,

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1 History of Art.



the lower portion of the pillars being alone covered against wear and tear by bronze sheets. This bronze zone is succeeded by flutes like those of Tomb II. (Fig. 198), whilst the head of the shaft is the well-known capital of every Mycenian column. The middle division of the anta is composed of round timbers which serve the twofold purpose of breaking uniformity of aspect and of concealing the joints; these in time would have been sure to widen and gape, had the contiguous surfaces been flat. Why

Fig. 300.-Mycenian palace. First epoch. Arrangement of woodwork.

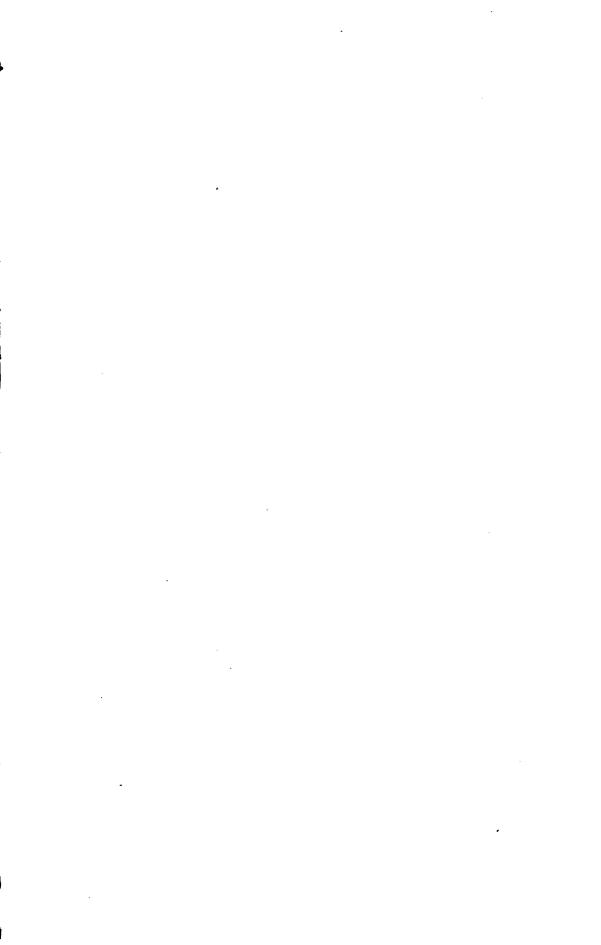
should the employment of discs have been confined to a horizontal position? Our entrances have the usual inward slope which characterizes all the stone doors of this architecture.¹ The cases are made of thin planks set back the one from the other, an arrangement which we have met before in Lycia, as well as in the façades of the domed-tombs at Mycenæ (Pls. IV.—VI. and Fig. 198). Over these doors we have put trellised windows, without which the inner vestibule (prodomos) would have been left in utter darkness, whenever the door was shut. With respect

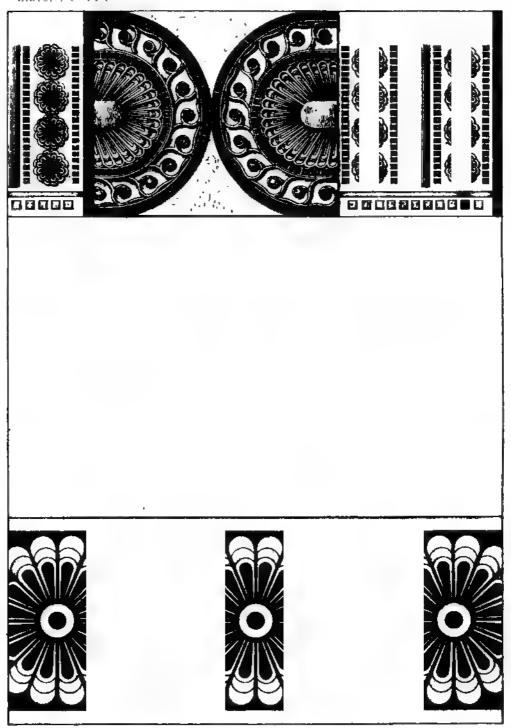
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¹ See ante, Vol. I. ch. iv. § 3, a.

to the great hall, it is quite possible that in the oldest buildings the only light it received may have been from a square aperture pierced in the centre of the roof. But as the rain would penetrate the room as well as the light, put out the fire, drench the inmates, and ruin the pavement, means must have been sought, with the advance of the carpenter's art, for obviating so great an inconvenience. This was found in a lantern set up above the centre of the room, furnished at the four sides with apertures which not only let in the light, but formed an outlet for the escape of the smoke. We had, of course, no choice but to set it up; such as it is, however, it would have formed a poor obstacle against percolating water, since it is no more than an "architraved cornice," which enframes the thin ceiling and the layer of earth above it. True, this species of cornice crops up in a certain class of Ionic tombs of Asia Minor, and also in the Pandrosion at Athens, yet the existence even then of more elaborate and richer entablatures is clearly demonstrated by the sepulchral façades, where the leading lines of the decorative scheme of a palatial front are apparently reproduced. There was, then, a form of regal abode which in some sort followed on that about which we are busy, whose mode of construction and adornment were dependent on a more advanced art. This it is which we have essayed to embody and re-establish in elevation and section (Pls. XI., XII.) as the final expression in the development of this architecture.

In our view of Tiryns (Pl. VIII.), the palace of the first type is seen towering above the walls; a distant view of the second type—to be defined presently, and which allows of no detail to be clearly made out—is given under the heading of Mycenæ (Pl. IX.). As in the first restoration, in this also we have no intention of reviving subordinate apartments; for although they are associated with and encircle the great hall, want of height and size makes them look insignificant. The fact that the shape and extent of the area covered by the royal house is not the same at Tiryns as at Mycenæ, has influenced the number and distribution of the minor buildings. Following the example set by the Mycenian architect, we shall bring the main effort of our restoration to bear on the megaron. The younger palace, the palace of the second epoch, is built on the same plan as that of the first type. We assume that the builder, having gained experience and practical skill, has supplemented his former insufficiencies,





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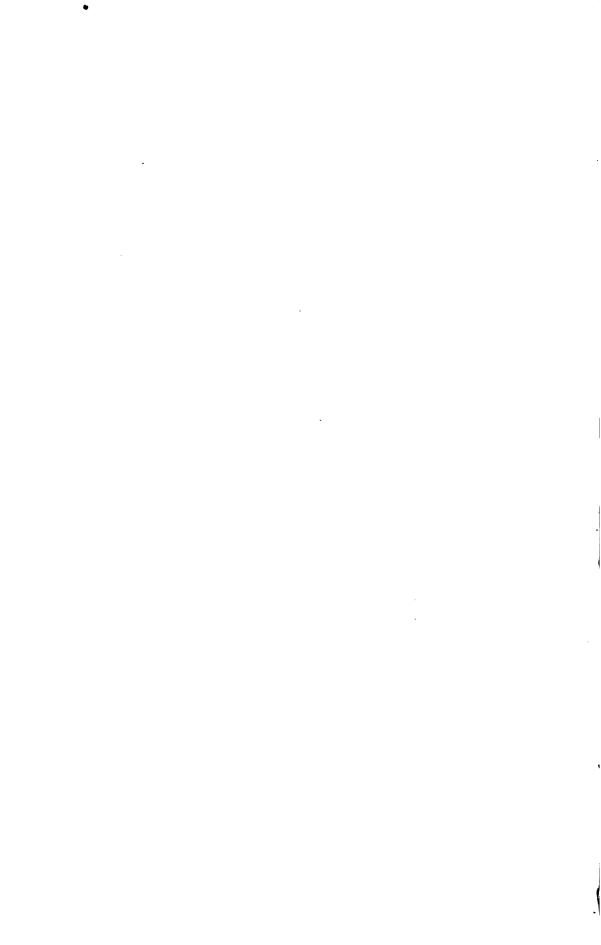
TIRYNS AND MYCENÆ
POLYCHROME ARCHITECTURAL DETAILS

Fig. 301.—Mycenian palace. Second epoch. Arrangement of woodwork. Plan taken at the height of the capital.

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by giving greater depth to his coverings, and that, as we gather from the ruins of the Tirynthian palace, he has endowed his decoration with richer effects. The loft is practically identical in both systems, except that in the second period the member which we call "frieze" has been added and inserted between the architrave and the cornice. This enables us to set up at that height a lower floor, composed of timbers of considerable size (Fig. 301). The upper floor is constituted on precisely the same lines as that of the first palace. Above the capital appears a

Fto. 302.-Mycenian palace. Second epoch. Arrangement of woodwork above the capital,

complement which recalls the terminal form of the bas-relief over the Lions Gate (Pl. XIV.). It also corresponds with the two-fold plat-band, surmounting the head of the semi-column in the façade of the Tomb of Atreus (Pls. V., VI.). This double supplementary member is not put there for mere show; from each column starts a course of beams extending across the porch to the end wall, whereon they repose. The downward pressure which they exercised on the pillars, whilst keeping these in position, had the twofold advantage of making them "sit up," and of adding to their height (Fig. 302). The shaft, like the

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abacus and echinus of the capital, could be cased in metal above and below. This cuirass lends itself to all the refinements of bronze repoussé work, and is enriched with designs borrowed from the carving seen on sepulchral facades or other instances of Mycenian industry. With respect to the antæ bounding the porch, the elements and materials of which they are composed are identical with those of the first edifice; but here the arrangement shows advance. Each anta consists of three plane faces, separated by semi-cylindrical shapes; cross-beams serve to maintain the joists in position, and to enrich the design of the single compartments. The greatest change is manifest in the entablature. Metal, whether in the shape of discs, angular pieces, or strips, covers nearly the entire cornice, the salience of which is much greater here than in the first type; whilst the presence of the frieze is quite a new feature. In setting it up we have followed that of the Tirynthian megaron, which, as we know, was embellished with incrustations of blue paste (Pl. XIII. 1, and Figs. 226, 227).1

Examination of the frieze in question convinced Dr. Dörpfeld that so splendid a piece of work could not have been designed for the place where it was discovered,2 e.g. on the left wall of the vestibule leading to the megaron. The metopes seen on these slabs are four inches thinner than the triglyphs; the result is a broken line which is not in harmony with the straight wall, nor are they in direct contact with it. Between the foot of the slabs and the edge of the floor, as also between their reverse face and the wall, are voids that have been made good, here with rubbish, there with earth. Hence we may safely infer that when the frieze was set up, wall and floor were already in existence. Moreover, the triglyphs show a dowel on their lower edge (Fig. 226). This tenon-shaped appendage is meaningless where the frieze now stands, and must have served to fix the frieze, either to a stone base, or a timbered plate. Dr. Dörpfeld advances the conjecture that the palace was partially destroyed by fire, and again rebuilt and inhabited for a certain time. The frieze doubtless fell on the floor during the conflagration. The situation of the slabs in the vestibule of the megaron points to their having replaced a wood wainscoting which had been destroyed or removed, and left the wall uncovered below.

¹ See ante, Vol. I. p. 290.

But where was the frieze originally? "At a certain height," says Dr. Dörpfeld, somewhat vaguely. The discovery of two fragments from the decoration of the upper part of Tombs I. and II. at Mycenæ enables us to be more assertive (Figs. 272, 273, 286). In his provisionary restoration of Tomb II.—which he has placed at our disposal (Fig. 286)—Dr. Dörpfeld places over the door one of the fragments in question; that is to say, he assigns thereto a function akin to that which, in our restoration of the palace, we attribute to the alabaster frieze. The vivid tints of the glass-paste, whilst accentuating the outline of the pattern, enhanced the effect of those elegant curves, intersected at regular intervals by vertical lines recalling triglyphs; colours and forms were trenchantly relieved against the plain surface of the architrave on the one hand, and on the other in charming harmony with the enriched cornice below.

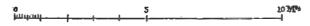


Fig. 303.—Mycenian palace. Second epoch. Woodwork above the capital at the height of the frieze.

The alabaster slabs are from fifteen to twenty centimetres thick. Fig. 303 shows how they were fixed to the woodwork; each triglyph lined the salient face of a longitudinal timber, whilst the metopes were applied to the cross or tie-beams. We cannot explain in this place how the alabaster frieze has furnished a device which is generally considered as one of the distinctive features of the Doric frieze, namely gutte. The question will be treated by and by, when we shall endeavour to show that the noblest type which prevailed during the classic age of Hellenic art had its beginnings and roots in Mycenian architecture. Agreeably with the conjecture we have adopted, we have pointed out how the mingling of the two processes, stone and wood, clustering timbers as facing to antæ, and tie-beams in brick and rubble walls, are in perfect agreement with the habits of the builder of that epoch.

As to the fact that none of the columns—as clearly indicated

in the ground-plan—are on the axis of the entrances, it would be easy to cite irregularities of the same nature in more advanced stages of art. Ancient Greece never suffered from a mania for absolute symmetry; the word itself, as interpreted by her architects, had a slightly different meaning from that which we now attach thereto, although we have borrowed it from her. We next come to the entrances. We assume that the wood folding-doors were overlaid with bronze plates. In surrounding them with rosettes, we follow a rock-cut tomb at Mycenæ (Fig. 234). timbered frames which close the impost recall certain forms seen in the decoration of the ceilings of Egyptian tombs.1 The example of the Orchomenos ceiling authorized us to seek patterns on the banks of the Nile, without binding ourselves, however, to slavish interpretation. With regard to the forms distributed about the uprights of chaplets, of leaves, horizontal bars, rectangular shapes, and the like, they are all to be traced to the repertory of the Mycenian artist (Figs. 213, 223, 227, etc.). The erections extending right and left of the megaron call for no particular notice. Above a foundation of rubble masonry, the wall is continued with courses of crude brick, and beams which intersect one another, their heads peeping out from under the roof. windows, unlike the doors, are not trapezoidal in shape, but mere rectangular slits or interstices left between a pair of beams. section is intended to give an idea of the mode of lighting, and the amplitude of the great hall (Pl. XII.). Remembering the predilections of this art, we could not but clothe our walls; all the forms put there are those it most affects. If the plat-bands which appear on the columns supporting the roof bring to mind the corresponding member of the Ionic capital, it is not because any specimen of this variant of a well-known type has been found in these ruins, but simply to indicate that the shape might well have developed in that sense.

The coloured figuration which adorns the walls of the megaron is borrowed from the frescoes that have been collected in the rooms of the Tirynthian and Mycenian palaces. The dimension of the patterns is identical with that beheld on the existing fragments. For reasons of size, images borrowed from the animal and vegetable kingdom are placed as far as possible on a level with the eye of the spectator. From these plastered fragments

also comes a continuous pattern, extending along the whole expanse of the upper portion of the wall. If some great picture existed in this hall, like the wild bull's chase of the Tirynthian megaron, that picture must have stood on the end wall, facing the entrance. Finally, along the upper surface of the wall runs a frieze which reproduces the design of the alabaster specimen; triglyphs and metopes could of course be painted on a stucco facing; but more probably they were carved in a stone band, red, green, or white, which was inserted in the masonry. The middle of the room is occupied by a massive circular hearth.

Although the only existing portion of the palace at Tiryns, whose main façade and biggest room we have restored, are the foundations, we flatter ourselves that, thanks to the method we have pursued, an edifice has been bodied forth whose proportions, style of building, and decorative scheme are really coeval with those of the sepulchral façades. Like these, our restored building bears witness to the same methods, is dependent on the same art. Are we to figure under this same garb the abodes where—on the authority of Homer-lived Priam, Menelaus and Nestor, Alcinous and Odysseus? How far does the plan of the royal houses at Tiryns and Mycenæ, such as we read it on the ground, agree with the one we have essayed to re-establish, from allusions, scattered with no sparing hand in the Odyssey, to this or that arrangement relating to habitations wherein is laid the scene of many an episode of the poem? The question of late has been warmly discussed among archæologists. We cannot, without infringing on the boundaries within which our researches must be kept for the present, deal at any length with the subject.

A cursory glance at our plates and the accompanying explanations must have brought home to the reader many resemblances between the type revealed to the world by the result of recent excavations, and the one we had previously pictured to ourselves from Homeric gleanings. There are first the courts $(\alpha \dot{\nu} \lambda \alpha i)$, peopled with the inmates of and visitors to the palace, where, under porticoes, part of the day is spent in dalliance. These we have found again, with covered galleries, in the buildings we have passed in review. What are the propylæa that form so monumental an entrance to the castle at Tiryns but the $\pi \rho i\theta u \rho v$, or $\pi \rho i\theta u \rho a$ $\tau \eta s$ $\alpha i \lambda \eta s$, of Homer?

True, we hear of but a single court and one πρόθυρον in the house of Odysseus at Ithaca; but then Odysseus was no more than a laird; with a powerful ruler, however, such as the king of Tiryns or Mycenæ, who held lordship over the teeming plain of Argos, we may surely conclude that greater development was given to the palace, and that court and portal were at least doubled. The court of the house of Peleus, like that of Odysseus, contained an altar sacred to Zeus Herkeios, whereon the head of the family burnt fatted victims and poured libations.1 This same altar has been found at Tiryns, on the very spot where one would have been tempted to look for it. Again, great breccia blocks everywhere form the thresholds of entrances; they bring up to the mind the Aάινος οὐδός, "stone sill," a term which frequently drops out of Homer's lips, and sufficiently proves the importance attached to that member of the construction in his day.2 Then, too, is not the great hall whose façade we have figured, and of which we have given a longitudinal section, the Homeric megaron with its two vestibules (αίθουσα and πρόδομος) preceding it and adding to its convenience?3 Apartments which served for gatherings, whether of men or women-and which might be called the drawing-rooms, did not the word sound too modern-were provided with a great hearth surrounded by pillars and seats, where people came to warm themselves or work by the light.4 In the centre of the principal room of the Tirynthian palace appears a circle which marks the site of the hearth, and around it are indications of pillars. Of the part played by the bath in the life of the Homeric heroes it is unnecessary to speak.⁵ The dust-travelled visitor, weary and spent after a long day's march, is led by female attendants to a room where he finds "a well-polished bath," (ἀσάμινθον εὖξεστον), full of warm water; 6 and here, in the proximity of the megaron, we find a chamber which has been purposely built to serve as bath-room, where, too, scraps of an ancient bath-tub have been collected. Besides public rooms where the stranger is admitted, the abodes of Nestor,

¹ Iliad; Odyssey.

² In referring to the temple of Apollo in "rocky Pytho," Homer never fails to mention its stone threshold.

³ On the meaning of the words αἴθουσα and πρόδομος, see a paper by PERCY GARDNER entitled, "The Palaces of Homer" (*Hellenic Studies*).

⁴ Odyssey.

⁵ Helbig, Das Homerische Epos.

⁶ Odyssey.

Menelaus, and Alcinous contain a number of $\theta \acute{\alpha}\lambda \alpha\mu\omega$, "sleeping chambers," which were grouped "at the end of the house" (ἐν μυχῶ δόμου); 1 one of the rooms in the house of Odysseus is called $\theta \acute{\alpha}\lambda \alpha\mu\omega$ ς ἔσχατος, "the last apartment"; 2 that is to say, the one situated as far as possible from the front door. Similarly, at Tiryns, we see a whole series of rooms at the north-east angle, e.g. at the farthest corner of the court and of its πρόθυρον, the dimensions and arrangement of which indicate that they were the bedrooms of the house. And, if we take the leading lines of the houses of Odysseus and Alcinous, not only shall we find striking analogies between them, but also with the two edifices from which we have borrowed the elements of our restoration. The result is a picture such as one could have imaged forth even before Schliemann's advent.

Hence, the first impulse of the critic who has just compared the buildings in question, would be to affirm that Schliemann and his associates have given us back specimens, more or less complete, of the architectural type which Homer had before his eyes. Ere we yield to so fascinating a temptation, it will be well to glance at the objections that have been raised, and the reserves that are still kept on the subject.⁸

A main difference between the plan of the Tirynthian palace and that distilled from Homeric data is the following: in the former the portion which appears to be the women's quarter is situated at a certain distance from the megaron; its only means of communication with it are long, narrow, winding passages; whereas the whole context of the poem is to the effect that the gynecæum, in the house of Odysseus, was immediately behind the great hall; that both the end and side-walls were pierced with doors which opened directly on the women's apartments. Of these some are on the ground-floor, and others on the first storey, where Penelope is generally to be found. The private apartments, then, were connected with the great hall where the pretenders sit by the front and side doors, which permitted of unbroken movement to and fro. On the other hand, the megaron at Tiryns had no outlet except through the front door. case, it would appear, was somewhat different at Mycenæ; quite

¹ Odyssey. ² Ibid.

³ Consult, above all, R. C. Jebb, The Homeric House in Relation to the Remains at Tiryns (Hellenic Studies); and Οττο Puchstein, Jahrbuch des k. d. archæ. Instituts. Both authors cite recent studies bearing on the subject. See also Tsoundas, Μυκῆναι.

lately, long after our plan had been made (Fig. 116), fresh researches in the north wall of the first vestibule have brought to light a door which established a more direct communication between the men's quarter and the gynecæum.¹

It would be idle to deny that, in this respect at least, the two plans are different. But are we right to assume that in Homer's day, houses of the better class were all precisely alike, from one end of the Greek world to the other, built on one and the same plan? Why should there not have been, from Asiatic Hellas to European Hellas, from the abode of a wealthy lord to the house of a chief holding sway over a rocky islet, or a poor forgotten mountain district, notable differences in the arrangement of certain divisions of the habitation? Some of these differences may have been due to the configuration of the ground, others to the fact that the princes who built them these residences were not all equally influential, or equally opulent. The length of time during which the Epic poems were elaborated should also enter into our reckoning, as likely to have wrought modifications in the style of building. Thus, the Epos would advert to two distinct types of habitation, which it is held succeeded each other in the course of some centuries, the trail of which appears in the collective work which now is only represented by the Iliad and Odyssey. The oldest and also the simplest of the twin types, notwithstanding its having occasionally assumed considerable superficial development, would be the one which the excavations at Mycenæ and Tiryns have brought to our knowledge. With unimportant exceptions, they were all one-storeyed houses; the apartments, at any rate the principal ones, occupied but one face of the vast courts, the other sides being taken up by colonnades. According to the same hypothesis, the Greek and Roman abode of the classic age, the Pompeian house, would represent the later type. In it the apartments are distributed around the four sides of the court, and nearly all have an upper storey. The second type began to appear towards the end of the period which witnessed the final recension of the Epos. We get glimpses and indications of this second form in those lines which apparently belong to the latest portions of the poem.2

¹ TSOUNDAS, Muknvat.

² Puchstein would identify this type with that of the palace of Priam, with its fifty chambers of polished stone for the sons of the king, and twelve more for his

Setting aside the younger type, which we divine-get an inkling of rather than a distinct perception—we ascertain that the distinctive characteristics of the house lately exhumed at Troy, Mycenæ, and above all at Tiryns, are in perfect agreement with the notion which we gain from the poet relating to the most luxurious abodes that came within the range of his vision. Here and there we recognize the expression of feelings common to both, the influence of the like surroundings, the impress of the same manners and customs, and very similar needs are satisfied by the architect and decorator with identical means. Our survey of the ground-plan must have convinced the reader that, in despite of minor differences bearing on detail, correspondence between the main lines is real and distinct. The remembrance of our oftrepeated observations in regard to the work of the ornamentist, the designs and materials he employed in decking out the princely abode, will deepen the impression which he has obtained. We are thus brought to acknowledge—as the sequel will show—that the Epos has preserved more than one vivid reminiscence of the Mycenian age, which reminiscence lived on without a break or notable modification in the period overshadowed by the great name of Homer.

sons-in-law. They all open into the same court and face each other, κουράων δ' ἐτί-ρωθεν ἐναντίοι ἔνδοθεν αὐλῆς (Iliad, vi. 242-250). No such princely house, we may be sure, with sixty-two apartments distributed around a court, existed in Homer's day. The number is purely fanciful, suggested by the tradition which represented Priam as the happy father of fifty sons and twelve daughters. But the abode which he describes to his audience was not imaginary, but taken from actual buildings. Some such habitation is in his mind's eye when he tells of Telemachus going to rest in his "high chamber which overlooks the stately court" (Odyssey, i. 425, 426).

CHAPTER VIII.

MYCENIAN BUILDINGS, AND THE ORIGIN OF DORIC ARCHITECTURE.

Our of the different forms evolved by the Mycenian builder, one alone, that of the domed-buildings, is represented to-day by edifices which, in despite of much weathering, bear noble witness to the practical knowledge and the taste of their originators. the other type, that of the palace, complete or almost complete ground-plans are visible on the soil, whether at Troy, Tiryns, or Mycenæ. The height above ground of the existing part of the wall, though feeble enough, affords certain information to him who undertakes to put back the elevations of buildings, the height and spacing of whose columns, the composition and modes of construction of whose walls, are matters of common knowledge among archæologists. If we have chosen to utilize these data, to the end that we might define the methods applied to the construction of the Mycenian palaces, if we have made it our business to raise them from their ruins, to grasp their ordinance and re-establish their probable outward semblance, the motive impulse was perhaps less due to the wealth and fairness of the external and inner portions of the buildings we have restored, than to the historical juxtapositions to which this constructive scheme lends itself. we strove to re-establish these ancient blocks of buildings, the conviction was forced upon us that many forms seen in classic architecture can only be satisfactorily explained as survivals of distinct peculiarities, which in an older architecture had been due to the materials to hand. That these differed from those which Hellas subsequently employed in the erection of her temples will be sufficiently proved, we hope, by a few examples, without having

to go farther into the subject. We beg to be pardoned if, for reasons of demonstration, we anticipate somewhat on the sequel of these studies, and assume a theory, that of the "orders," to be known, although as yet there has been no opportunity for broaching it. The reader need feel no alarm as to the allusions which will be made to certain rules and facts, for they will be intelligible to any one possessed of a superficial knowledge of the history of Greek architecture, and easily grasped with the aid of the least elaborate of manuals.

In the course of our researches, we have not unfrequently adverted to a tendency, the effects of which we are about to consider, as to the influence which the methods proper to the Mycenian architect exercised on Doric architecture, the fairest and most individual creation, perhaps, of the plastic art of Hellas. We said how, among several nationalities whose monumental work we have described, the artisan seems to take pleasure in applying forms to a material clearly sprung from the employment of a different substance, be it artificial stone or brick which imitates natural stone, calcareous rock, or marble; more frequently, however, it is stone which copies the shapes rendered familiar by wood and sanctioned by usage: a wooden fence set around the property, or a built hut with a covering of unsquared timbers; then, with the advance of industry, wood is found cut up into planks and squared beams, so as to compose the walls and woodwork of the domestic abode; this, though still liable to many mischances, is already provided with qualities of size, of comfort, and even of a certain elegance of its own. Egypt and Assyria, Phrygia, Lycia, and Persia furnish us with quaint examples of this transformation of shapes. Not the least curious specimen occurs at Mycenæ, in the slab-circle surrounding the royal cemetery of the acropolis (Fig. 100). The edges of the covering slabs have a double row of dowel-like saliences, which fitted into cuttings purposely made in the upper edge of the vertical plaques. The stone-cutter had borrowed from the carpenter one of the most popular and primitive modes of assemblage.

The main characteristic of the Mycenian palace is the large place and the part which timber played in it. Not only was the column of wood, but also the architrave which it supported, as well as the longitudinal beams and joists constituting the roof and resting on the cross-beam. It has been supposed that temples were constructed on the same lines, and certain shapes in classic architecture, guttæ, triglyphs, and the Doric mutules, have been accounted for as derived from an older architecture, where the supports and the upper part of the building are timber; but to our mind the shapes in question have as yet not been satisfactorily explained. Let us take a gutta such as it appears in the C. temple of Selinous, one of the oldest types of Doric work (Fig. 304). There can be no doubt that it was copied from a wooden peg. The gutta is cylindrical, carved in round boss, and completely separated from the wall. Had it been carried

Fig. 304.—Gutta in C. temple at Selinous. Section through listel of architrave.

above the listel of the architrave, it would stand out in empty space. Hence the peg represented by this small stone cylinder cannot have served to fix and maintain in place wood pieces, such as the beam of the architrave, and the plank whereon the triglyph is carved, and with which it has no contact. If it be conjectured, as some have conjectured, that the pegs met the plank representing the triglyphs of Vitruvius, it will necessarily follow that the frieze stands on the plain surface of the architrave, and the salient triglyphs on the frieze. But no such arrangement has ever been seen on any Greek temple from the earliest days down to the decadence. In all the periods the frieze is always set back from the architrave, and the triglyph is put on the

plain surface of the latter. This canonical rule was strictly obeyed, for we observe that the architect of the C. Selinous temple has cut the metopes in such a way as to prevent the figures on them jutting out, or infringing on the plan of the architrave.

This, when plain, is sometimes, though rarely, adorned by a frieze; but in that case it is always associated with civil architecture, such as porches and Roman buildings. The peg, moreover, is much too slender to have effectually prevented the contraction and expansion of a stout timber beam.

To us the solution of the problem appears to have been solved

by the alabaster frieze which Schliemann brought out of the ruins of the palace at Tiryns (Figs. 226, 227). The pattern in its main lines is one which is frequently found in the Mycenian ornamental It consists of a double design, two semi-circles front to front, divided by horizontal strokes, and a narrower rectangular band whereon are traced vertical striæ, with due accompaniment of squares and elegant rosettes. This rhythmic arrangement brings to the mind metopes and triglyphs. The analogy is marked enough to have caused the learned architect who discovered the frieze to use the above terms in describing the antiquity. This composite design had been met before on glass. pastes from Spata and Menidi (Fig. 225), as well as on green or red bands that have been collected in the acropolis of Mycenæ (Fig. 224), and near to the bee-hive tombs of the lower city where they formed part of the façade decoration (Figs. 272, 273). The elements of the pattern are alike in both, but from the older bands to the alabaster frieze there occurs a notable difference. Everywhere else, except in the Tirynthian frieze, the component parts always appear in the same order, and without breaks, answering to what may be called the organic divisions of the artificial unit; the series only stops short at either end of the slab, to be similarly repeated on the adjacent plaque. At first, these joints can scarcely have been visible. The length of each of the bands does not correspond with the natural articulations of the decoration, but was regulated by the dimensions of the block from which it had been derived, and the convenience of the stonecutter. The thickness of these slabs is uniform; their juxtaposition resulted in a continuous ornament which might be applied to any surface, whilst they would keep inviolate the

internal arrangement of the masonry or wood-frame of which they formed the lining.

The case is quite different with the Tirynthian frieze. Here we have a separate piece for each of the double elements of the system, one for the pair of tangent semi-circles, and another for the two vertical rows of ornaments. If the single pieces of the first series are thinner and longer, those of the second are narrower, and tail deeper into the wall; they also jut out in front beyond their fellows, and overlap the façade at the sides by four centimetres. Hence the frieze presents itself in the form of a series of slabs placed edgewise, and of pillars exercising a downward pressure on these and keeping them in place. The dimensions of the pillars, forty-three centimetres broad by fifty-seven centimetres deep, are those of a great beam. On their internal face appears a cutting, a kind of rebate which shows that the frieze was intended to be fixed to some flat surface of the edifice. Whatever may have been the mode of joining, it served its purpose well, and endowed the pillars with the requisite stability, and enabled them to fulfil their function. There is a last peculiarity to be noticed about this frieze: the central groove and the rosettes seen on what we have called "pillars" are not carried up to the top, they stop short within ten centimetres of the upper rim.1 As to the frieze, we explained why, contrary to the situation it occupied at the time of its discovery, we have introduced it as principal ornament in the palace entablature, where it has the great value of contrasting and of being set off by the timbers that surround the entablature.

Let us look at our alabaster frieze now that it is fixed to the wood architrave. Thanks to the weight of the pieces composing it, thanks above all to the overlapping of the lateral slabs, and the salience of the pillars in elevation on each side, we need fear no displacement of the single pieces, for they make up a coherent and solid whole. The architrave, however, was liable to contract and expand under the action of damp and heat; the warped surface at the back of the frieze would have caused the pieces to loosen and slip down, with the result that in a short time the edges would have become irregular and the surface rough. The annexed drawings (Fig. 305) will help the reader

¹ See ante, p. 140.

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to understand how, with very simple means, these evils were successfully overcome.

We next come to the double architrave A. In order to protect its upper face and assure its steadiness, we will place over it beam c, whose salient rim will meet the grooved edge of pillar D, and prevent its slipping backwards. Having now given a back prop to pillar D, we must see that it does not bend and fall forward. The result can be obtained by the simple use of pegs. In carpentry work, no better means can be devised than wooden pins for joining pieces together. A carpenter who knows his business employs no metal bolt, hook, or nail, but is content to secure his scarf-joints with wooden pegs and straps. Wooden clamps and pegs, moreover, have this advantage over iron bolts: being of the same substance as the elements to which they serve as means of union, atmospheric variations act on both alike; this would not be the case with a substance of different nature, such as bronze and iron; pegs prevent both the spreading and tension of the timbers, and their parting and breaking under the pressure of a foreign body. Pegs did well enough as means of attachment between the architrave and timber B; but they were wholly inadequate to hinder warping, twisting, and consequent gaps between the pieces, or to assure the horizontality of the frieze. These serious drawbacks were obviated by a small tablet B, which fitted into the channelled edge of pillar D above the architrave, where it rendered a twofold service to this member of the wood-frame. The greater tailing of the pegs into the thickness of the timber gives them more stability, whilst the number of the small boards would diminish the hydraulic pressure on the woodwork, and help rather than interfere with the play of the wood.

Having gone thus far, it only remains to fix the frieze in such a way that it shall stand well. This can be satisfactorily accomplished by uniting the ends of the two pieces, plate F and pillar D, by a scarf joint, so as to form a continuous piece. Now, in the pillars of the Tirynthian frieze, this portion is left plain or with unfinished ornaments; a clear proof that the part was concealed by a lining F, whose existence we have been led to divine independently. Thus, examination of the alabaster slabs confirms at every point the assumption reached by inductive reasoning and constructional necessities. Fig. 305 shows the

overlapping timber F in the act of being put on frieze DE, as well as its points of junction with the architrave A, beam C, and tablet B. The several pieces are seen jointed together in Fig. 306. The lower portion of the entablature, close to the point where it tails into the massive wall bounding the vestibule of the megaron at either side, appears suspended in empty space. The beams RS served to line and strengthen the head of the wall. One of the longitudinal joists, which serve as ties between the columns and the entablature of the end wall, and make up the

Fig. 306.—Mycenian palace. Second epoch. Assemblage of the component parts of the

ceiling of the vestibule, is seen at H. The raised plate or inter-tie G, though figuring in the sketch (Fig. 306), does not belong to, and is quite separate from the entablature, for by themselves the architrave and frieze could not constitute the whole entablature, and were inadequate supports. A stout resisting floor was requisite to bear the heavy clay covering, and the beams which kept it aloft jutted far out beyond the wall to protect its loose masonry of quarry stone, brick, and wood against the rain. The projecting joists in question are well seen in the perspective view of the palace wall of Mycenæ (Fig. 307), of which an elevation was given in Fig. 175. The Ionic entablature exhibits,

reproduced on stone, the salient heads of the timbers, whether as dentils or modillions; but as they are non-existent in the Doric entablature, we may safely infer the latter to have been derived from a system wherein the beam-fronts were concealed by a lining, which served the double purpose of covering them and giving the cornice greater amplitude, so as to render it a more efficient shield for wall, architrave, and frieze against the weather. Our Fig. 308 represents a cornice where all these conditions have been duly fulfilled; its composition is shown both in separate pieces, and joined together by the hand of the carpenter. A course of planks (M) is laid across the lower face

Fig. 307.—Section of wall of the Mycenian palace.

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of the beams, to conceal the joints. Hydraulic pressure would ere long have caused displacement in the continuous surface obtained by setting the planks side by side, and have disagreeably impressed the sense of order. The danger was averted by a series of small wooden boards, which fitted into cuttings contrived in plate G, and covered the joint along its whole extent. The arrangement was valuable both from a constructional and artistic standpoint, in that it provided saliences and hollows which helped the ornamental effect.

But it had one drawback: as such pieces as these rest on nothing in particular, they are apt to stir, slip down here, get warped and move up there, part from their bigger fellows, and the result is an upper broken line. As with the frieze, here also the end aimed at was secured by piecing together the lower planks N and the upper boarding M with wooden pins.

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Fig. 308.—Mycenian palace. Second epoch. Showing the separate pieces of the comice.

So far so good; the lining which has been established for the under face of the timbers left nothing to be desired: it only remained to shield their salient heads. What could be easier ١

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than to set up, edgewise, plank o in front of the beam-ends (Fig. 309), making it fast by a simple scarf joint. This would prevent lateral displacement, whilst the plank could be further secured with many pins to the tie or longitudinal beams. On this species of cuirass we place, flatwise, plank P, providing it with a groove to fit the upper edge of plank o; in this way the culminating portion of the cornice on which the rain directly falls will receive a continuous and efficient facing (Fig. 310), whilst a corona will be constituted which shelters the subjacent portion of the wall of

Fig. 309.—Mycenian palace. Second epoch. Showing the single pieces of the cornice put together.

the entablature. This water-moulding has one defect, it is wooden; no matter the length of planks o and P, they will have to be joined at some points, let these be ever so few in number. With the parting of the timbers, the rain will filter through, rot, and cause them to break at those points. To grasp how the many joints in the course of planks M were protected against the weather, we must remember the large place which the Mycenian architect gave to metal plates as facings to his surfaces. If his love for this style of enrichment was so great as to have led him to veil his stone walls with metal, where the labour was long and arduous, we may confidently assume his having dowered the woodwork of

the better class of buildings with a brazen cuirass, which could be easily fixed.

Apparently, the Mycenian architect employed but two forms in his decorative scheme; namely, spirals, and the pattern recalling the Doric frieze. We have utilized the latter for our frieze, the only division of the entablature where it would go, and the spirals have been fittingly applied to the corona. Their continuous, unending curves run above the rich elements of the frieze; they look well in the field of that narrow band, between the long, vanishing lines of the cornice, which is trenchantly relieved against the deep azure of the sky. Fig. 311 shows the pieces we have just described and defined set up in position. It will be observed that the arrangement exhibited here is not quite the same as that of our restoration of the Mycenian palace (Pl. XI.). Of course there, too, the typical ornaments, spirals, metopes, and triglyphs, appear

Fig. 310.—Mycenian palace. Second epoch. Lining of water-moulding.

in the corresponding situations, but the lower parts of the cornice are united with visible pegs at the sides of the central pavilion only; whilst from the cornice, in the elevation of the wall, peer rounded beam-ends or discs. This arrangement invests the cornice with greater height and amplitude, but it does not form so coherent and solid a piece of work, capable of standing the brunt of any eventuality, as the specimens just described. These are at once very simple, yet of a simplicity allied to a good deal of ingenuity, and of the kind which is not attained in early youth. In what edifice did these forms originate? We cannot say; what appears certain is that they represent the ultimate progress and the last step in the organic development of Mycenian construction, the phase that immediately preceded the rise of the Doric order. This is proved by the Doric entablature seen in the oldest buildings of the order, where we find reproduced in stone every feature and every member whose place and function

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we have pointed out and determined in the wood-framing restored by us; in it the corona is cased in bronze, and inserted between the timbers of the architrave and of the frieze is a frieze of stone.

In Fig. 312 we have the entablature of the C. temple of Selinous, rendered famous by the archaic sculptures embellishing its metopes. There is not one of all the members we have passed in review but which appears in it. Thus, a pair of stone beams, corresponding

Fig. 311.-Mycenian palace. Second epoch. Restoration of entablature.

with the like number of timbers in the Mycenian wood-frame, constitute the architrave; and under the listel c surmounting it, peers, flush with the triglyphs, the small plank B. Its lower section is adorned by the ornament known as guttæ, the origin and meaning of which had hitherto been unsatisfactorily explained. The guttæ are cylindrical in shape, detached from the walls, and in every respect identical with the wooden pegs which occur in this situation below the timber entablature. These same pegs, again,

appear above the frieze in the semblance of another ornamental form, the "mutules," which until lately had seemed every whit as strange and problematical as the guttæ. The stone table N, in the lower surface of which guttæ are carved, is no other than our old wood-plate, which in the Mycenian carpentry work exhibits these

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F16, 312.—Entablature of C. Selinous temple. Perspective view.

same saliences or pegs, and served to fix the lining of the joists below.

If the Selinous mutules are sloped, it is because they are associated with a ridged roof; but as a flat covering has been assumed for Mycenæ, it involved—without prejudice to the system—a horizontal position for the mutules. As regards the frieze, both here and in every Doric building, it invariably

consists like the alabaster frieze of pillars (D) alternating with slabs (E). Our pillars and slabs correspond with the Selinous triglyphs and metopes. The difference is this: the rosettes and other subordinate forms seen about the triglyphs have been discarded, and replaced by channellings, the outline of which already furrows the middle of the face of the Mycenian pilaster. The opportunities offered by metopes have been eagerly seized by the sculptor, and the whole field has been covered with mythological subjects carved in low-relief; the arrangement, however, on plan, never varies, and here as there, the function of the pillars is to maintain the slabs in place. The lateral edges of the slabs are tailed into channellings cut in the sides of the triglyphs; between these slabs and the courses forming the wall

Fig. 313.—Mycenian palace. Second epoch. Longitudinal section through prodomos.

behind the entablature occurs a cavity, the exact correspondence of which is to be found in the wood-framing, e. g. between the thin stone slabs and the timber beams which they masked. Again, indicated above the triglyphs is plank F, which capped the pilaster, and under the mutules, plate G, the lower member of the cornice. Like the model we have built up, this is composed of a listel, M, answering to the course of planks laid against the lower face of the joists, a broad band, o, the counterpart of the plank set edgewise in front of the beam-ends or discs, and a terminal moulding, which is no more than the slightly-jutting plank P, crowning the whole. The slip which served to marry the plat-band with the cyma moulding is non-existent here, for the simple reason that the cyma and plat-band of the Doric temple are not unfrequently carved in a single block of

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tufa or marble. Although the cyma does occur as a separate member of the cornice in buildings of the class whence we have taken our type, its weight suffices to keep it in position.

There is yet another point in common between the wood cornice we have restored and the corresponding member of the stone edifices of the following age. If there are no traces of painting on the Selinous plat-band and tie-beam, remains of colour have been discovered in many other temples, at Ægina and elsewhere. It may be remarked that the style of the tinted ornament which has come from the regions under notice exhibits in a general way those characteristics which we ascribe to the brazen cuirass covering the joints of the wood-frame; namely, a slightly modified pattern of spirals, for which authority exists in Mycenian art. We have here another instance of those

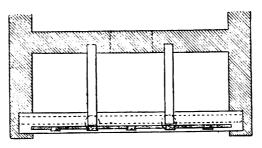


Fig. 314.—Mycenian palace. Second epoch. Plan of the wood-frame at the height of the frieze.

transmissions which form a connecting link between the architectonic work of the classic age and that of the archaic period. Relating to the Doric frieze, we think that our theory with which we account for its composition will appear more simple and satisfactory than any previously put forward. As already remarked, the dimensions of the pillars in the Tirynthian frieze average those of an ordinary beam; hence, in the construction, they must originally have coincided with the heads of the longitudinal joists which rest on the wall coping (Fig. 314). architrave, in the elevation of the wall, is supported by two single pillars alone, which carry aloft a pair of huge timbers thrown athwart the vestibule. Had the ornament been reserved as a facing to the beam-ends alone, it should, strictly speaking, only appear twice in the portico frieze, above the columns; such an arrangement, however, would have robbed this architectonic member of the rhythmic succession of slabs and pillars. Hence,

in our restorations, we have not hesitated to admit that this pattern, originally suggested by the necessity of protecting the beam-ends, was afterwards retained for artistic reasons, although no longer fulfilling any constructional purpose. We have put it, at regular intervals, in front of the joists, along the entire breadth of the entablature. This part of the building is that towards which the eye instinctively turns from the first, and should, therefore, be most richly embellished (Fig. 303). Fig. 315 shows how the joisted ceiling was pieced together. Its arrangement is a matter of taste, and in no way invalidates the explanation we have advanced relating to the origin of the Doric frieze.

A complete entablature, furnished with all its members, and



Fig. 315.- Mycenian palace. Second epoch. Plan of timber frame of prodomos above the frieze.

its full value, is never met with except over a porch such as that which graces the principal façade of the Mycenian palace. Heavy architraves would be useless and meaningless on the lateral fronts, where a simple cornice resting on a thin plate, or plat-band, is all that is required in good construction; for the wall itself supports the cornice, and does duty as architrave. The wall has no need of cross-beams; constructional intentions are sufficiently met by making the joists bear upon it, either tailed into channellings or placed upon off-sets, so as to shield it against the weather. Thus we are brought round to the prodomos of the Mycenian palace as the one which best accounts for the Doric entablature. To explain away the forms constituting it there is no need to appeal, as some have done, to an ideal temple, with or without an external colonnade.

With the hypothesis of an ideal temple, we are faced, and have always been faced, by an insuperable difficulty. If we put mutules

at the sides, we cannot have them on the façade; and, conversely, if we put them on the façade, none can go at the sides. to get out of the net they have drawn about themselves, the upholders of the theoretical edifice—out of which they want to distil the classic temple—invariably give us a representation seen sideways of it. To assume that the Greeks placed mutules both on the facade and at the sides, is equivalent to saying that they set up part of the building for the sake of the decoration, that they subordinated the form to the ornament, a proposition which is diametrically opposed to what we know of the habits of Hellenic art. Would it not be much simpler to take the Mycenian buildings, whose existence is real and undisputable, as our point of departure? The prodomos of the Mycenian palace is enclosed by two walls, on which rest the beam-ends of the entablature. Longitudinal beams are required to connect the columns and the entablature with the farther wall, whence originated triglyphs and metopes in elevation. The side-walls were adequately sheltered by the cornice. Accordingly, we are no longer faced by the dilemma of having to choose between triglyphs on the façade or only at the sides. The main front of the Mycenian palace, it is plain, was alone so adorned. To a builder the fact being as clear as noon-day, why not admit that the Hellenes adopted as type of entablement the Mycenian prodomos? The form we are considering became a purely decorative system in Doric architecture, but the system had grown out of a primitive mode of building which made use of stone, brick, and wood, but which was wholly unsuspected before Schliemann's discoveries.

The Hellenes of later days forgot the borrowing, and with it the significance of not a few details; the names they gave to certain members of the entablature, the old pegs for example, are apt to lead one astray. If our hypothesis be allowed, the difficulties besetting the ideal temple vanish into thin air. All the later architect did was to carry the entablature of the prodomos around the temple, enclosing the cella by pillars on all the four sides. In point of fact, the Doric entablature represents architectonic forms, but transported and borrowed from an older building, the only one where they had a constructive value. The prototype of the Doric frieze has sometimes been sought in the cavetto which forms the crowning member of every Egyptian

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wall. It has been observed of the Egyptian gorge, that it often presents vertical channellings, under the listel surmounting it, the regular spacing of which brings to the mind triglyphs and metopes (Fig. 316). The resemblance is only skin deep; closer inspection brings home the fact that a wide difference parts the two entablatures. There is no distinction between frieze and cornice in the Egyptian buildings, and mutules and guttæ are conspicuous by their absence. It is the same with the Doric capital, whose prototype has been sought on the banks of the Nile, an hypothesis to which reference has been made and traversed by us. If Mycenian architecture was influenced by a

Fig. 316.—Egyptian cavetto of temple at Edfou.

foreign architecture, we should look for the source in another direction. The architectures of Egypt and Greece have different points of departure; they are not affected by the same needs or the same thoughts. Such methods as worked with materials other than those which had gone before were not brought into existence at Memphis or Thebes, but at Tiryns and Mycenæ, where with the passing of time they had grown and flourished, and were applied by classic art to the temple, its masterpiece and supreme intellectual effort.

It is possible that the relation we have pointed out might have been divined without entering into so elaborate a comparison of

1 History of Art.

the constructional elements. It is hard to account for the height of the Doric entablature, unless we see in it a copy of the woodframe which, in the edifices of the archaic period, had to carry the heavy burden of clay coverings; for such a style of building, timber frames composed of many pieces, both massive and of resisting power, were absolutely necessary. The temple has a ridged and much lighter roof, because it is covered with tiles; the reason why the entablature whereon it reposes has retained the same proportions and the same aspect as in the Mycenian palace, resides in the fact of its being copied on a model born under other conditions, and raised to satisfy other needs. It is not the constitution of the entablature alone which testifies to the affiliation and the close union between the first national architecture of Greece and that whose types, even at this time of day, serve as subjects of study and models to our artists. The plan of the Mycenian edifice, of which two different elevations are given (Figs. 314, 315), already shadows forth the arrangements which later builders will choose for the marbled ceilings of their temples. The ceilings in question are divided into rectangular compartments called "coffers"; but it was the old carpenter who, on piecing together his timber beams, traced out these fields, where the sculptor and painter were to lavish on stone, ornament of exceeding richness. The only difference between the two sets of ceilings is that the triglyphs which covered the fronts of the longitudinal beams in the archaic wood-frame are non-existent in the stone building. Stone beams of sufficient length to replace in the pronaos the timbers of another day would never have been found. So great is the stability of the Doric temple, wholly stone built, that it does not require beams of enormous size.

We are led to the same conclusions as regards the pillar, by taking as subjects for comparison the semi-columns of the domed-buildings at Mycenæ on the one hand, and on the other the supports of the oldest Doric temples, those that come nearest to the pre-Homeric buildings of Greece, and may therefore be expected to have points of resemblance with these. The shaft of the stone pillar presents an entasis utterly opposed to that of the semi-column. To us the semi-column appears to be an exact copy of the wooden supports at Tiryns and Mycenæ; its greater diameter occurs above, where it meets the architrave;

whilst the Doric column, which is a truncated cone, tapers towards the top. Apart from this difference, there is a striking analogy between the two supports, notably in the capital, whose elements, at Mycenæ, are already those of the canonical capital. Thus, with less elegance of design and less happy proportions, it consists, like the Doric member, of an abacus, supported by a species of cushion or echinus, whilst the ring of leaflets surrounding the lower part of the echinus occurs also, in the same situation, in the most archaic types of this order.1 When the column is fluted, as in Tomb II. (Fig. 198), the flutes are tangent to one another; to this arrangement the Doric order was faithful from first to last. Its column was never provided with a base, and the Mycenian member which does duty as such is not really deserving of the name. The slender plinth whereon rests the shaft is no base at all, but a reminiscence of the half-buried stone block of former days, which prevented the foot of the timber pillar from coming in contact with the humid soil (Fig. 197).

Finally, under the semi-circular fillet of this façade are other fillets, the feeble height of which is not proportional to that of the shaft. They call up to the mind the three steps usually found in the Doric colonnade, and the question may be raised whether they should not be regarded in the light of an imitation of a similar number of steps which led up to the porches of the Mycenian buildings (Fig. 83).

The upshot of the foregoing observations is to the effect that the Doric order is before any other that whose forms are derived from the distinctive shapes of the edifices which we have attempted to restore. The beginnings of the Ionic order are quite different, and will be dealt with by and by. Nevertheless, had we any desire to carry farther this study, we should find no difficulty in tracing to their source the influence exercised by primitive modes of construction, including such arrangements as are not the particular property of this or that order, but which crop up in most Greek buildings. Some brief indications, some examples chosen from among a host that might be named, will suffice to make good our

¹ Several examples of the ornaments in question which are associated with the echinus of the Doric capital are carefully examined in M. Otto Puchstein's learned dissertation, *Das Ionische Capitell*. The most part is taken from the temples at Pæstum, in Italy.

assertion. Even when the craft of the Greek mason shall be at its best, when he will make his walls—those beautiful "Hellenic walls"—with regular courses of tufa and even marble, the smallest scrap of which permits us to appreciate the marvellous precision which he carried into his work, he will none the less, here and there, still employ the processes which once had been popular with his ancestors of Tiryns, of Troy, and of Mycenæ. This was the case with the Long Walls which connected Athens with the Piræus. We learn from the decrees ordering their reconstruction, that the walls in question greatly resembled the ramparts by which the Trojan citadel was enclosed. The masonry evinced more ease and greater regularity than in the prehistoric rampart. Here as there, however, the wall, which was begun with stone, was continued with unbaked brick; and a species of wood-framing, made up of intersecting timbers, was inserted in the depths of the walls.1 These were given coatings made of clay mixed with straw. We think we can divine the reason which induced the builder to make use of such a process. These frames rendered the not unimportant service of distributing over a larger surface the pressure exercised on the fortification wall by the battering-ram and other attacking engines. The employment of timber ties at that comparatively recent period, whose one drawback is to serve as means of union to heterogeneous elements within the mass with which they have no affinity, can only be explained on the basis of atavism, a harking back to ancient methods, noticeable both in the Long Walls and buildings entirely made of stone. The abiding influence of habits contracted by the Greek builder during his season of apprenticeship never ceased to be exercised on the later mode of fabrication. Look well at the construction of any temple dating between the sixth and fifth centuries B.C., be it that of Poseidon at Pæstum, of Zeus at Olympia, the Parthenon, Theseion, or Erechtheion at Athens, and you will perceive that although the masonry within and without shows great regularity, the wall foundations up to the level of porch

¹ A. Choisy, Etudes sur l'architecture greque: II. Les murs d'Athènes d'après le devis de leur restauration. The information supplied by the regulation papers in question has enabled Choisy to establish the existence of wooden ties in the construction of the Athenian fortification walls. Some thirty years ago, pieces of wall were discovered at the Piræus, composed of stone courses alternating with beams, in length sometimes over ten metres.

or cella have a lining of a double course of huge slabs placed edgewise (Fig. 317), whose length is from one metre fifty centimetres to three metres, and from eighty-four centimetres to one metre fifty centimetres in height. Their dimensions, therefore, greatly exceed those of the superincumbent stones, whilst their salience beyond the wall—eight to ten millimetres—and their proportions single them out from the surrounding courses.¹ They constitute a species of continuous plinth for the lower

FIG. 317.—Basement of cella.

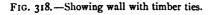
portion of the wall, but their intervention is not required by constructional necessity; the plinth, then, can scarcely be considered otherwise than as a reminiscence of a stone substructure which is allied to masonry made up of crude brick, where it invariably interposed between the damp earth and the clay mass above. The external appearance of this plinth also reminds us of the unwieldy slab or plank-lining of ancient days which protected walls of small quarry-stone against shocks, and the wear and tear of the section next to the soil. The indelible mark and persistent tradition of wood ties and facings, which formed

¹ J. DURM, Die Bankunst der Griechen.

no inconsiderable item in archaic construction, are everywhere traceable in that which superseded it. We have adverted more than once to vertical timbers laid along the wall surface, which it divided into a series of very similar compartments, whose symmetrical arrangement had a pleasing effect of its own (Fig. 318 and Pl. XI.). The eye was so habituated to this rhythmic balancing of the parts, that we find apparently a reminiscence of these ancient beams in the very narrow pilasters of the cella of the Erechtheion (Fig. 319), where they fulfil no constructional purpose.

The explanation for yet another characteristic point in classic architecture should be sought in the same order of ideas; namely, the shape seen about the anta of the temple, which it preserved

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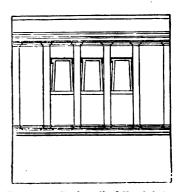


Fig. 319.—Back wall of Erechtheion.

down to the end of the third century B.C. The pilaster in question exactly reproduces, on plan, the profile of the Tirynthian anta, where the corner of the wall is covered with a sheaf of five beams, and other two at the return, one on either side (Fig. 320). Our first movement, on perceiving the attenuated lateral face of the anta, is one of unfeigned surprise, as of a want of proportion which the architects of the Græco-Roman age, one would think, ought to have made good, giving to that part of the pilaster greater depth. To find the cause of this seeming anomaly, we must go back to the origin of things, and carry ourselves to the time when the builder left off covering the exposed corners of his walls with a wooden armour, because his masonry throughout now consisted of well-dressed stones. In making the change, he allowed the anta to preserve the traditional shape given there-

to by his predecessors. His stone pilaster was a faithful copy of the one garnished with timbers, whose narrow lateral face corresponds with the thickness of the plank or plat-band which completed the defence of the wall at the sides.

Doors, battlements, and other architectural members would lend themselves to comparisons no less curious between the old and new state of things. These remarks may be fittingly closed with a few words on the decorative scheme. We cannot ascribe to chance the fact that all nations who inhabit sunlit regions should make a lavish use of vivid colours, which they impartially spread over the wide surfaces of their buildings. There is a relation of cause and effect between intense light and a taste for brilliantly-hued decoration, which latter is awakened by the action light exercises over the visual organ. What is different

(r)
Fig. 320.—Mycenian anta.

(2) Hel!enic anta,

from one race to another are the processes used to satisfy this innate craving. These are determined by the nature of the materials to hand. The Euphrates valley has no stone, and timber, such as the palm, is both scarce and of indifferent quality. There the necessity was felt at an early date of varying the outward look of the crude or baked clay mass, which invariably formed the body of every structure, with the intervention of colour. Enamel was invented, and the heat of the oven made it one with the brick.

The case was different in Greece, where stone and woods of excellent quality abound. Beams and planks without number could be had for linings and framings. To secure their durability, however, they required frequent layers of paint, and here and there metal plates. In Hellas, then, it was wood, as in Assyria it had been clay, which needed the interference of colour for all the exposed divisions of the edifice. The habit once formed,

coats of paint were even applied to stone which had better been left alone. For the sake of a brilliant veil, the stone entablature of the Doric temple preserved the colouration of the Mycenian entablature, where it had been requisite to protect the timbers against damp. To this should be added those painted terracotta squares, which required as little, nay, even less, than stone itself to be shielded against the elements. The tones laid on tufa and clay were as gay as those which the brush had once spread on wood beams, or had been reflected from brazen strips that lined the timber pieces. If the stone architrave of Hellas stands out from the very beginning in fair and full armour, and all the refinements which colour is able to impart, it is mainly due to its having been prefaced by a wood architecture. In conclusion, we would say that if our expository theory is open to question on minor details, it will have the merit of bringing home to every one with greater lucidity the kind of interest which attaches to Mycenian art. Many of our readers have doubtless wondered that we should have tarried so long in this primordial period, to which some have denied the claim of being considered Greek history. We think we have proved the necessity of turning to it for the solution of some of the most obscure problems which cross the path of the historian, who desires to lead back to the beginnings of the principal types of Hellenic architecture.

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CHAPTER IX.

SCULPTURE.

Materials, Processes, and Themes.

In the course of the primitive age, the sculptor utilized all the materials that had served him to construct and decorate his edifices in his rendering of the human form. In the first place, he had all the stone varieties which a hilly country supplied in abundance, dark volcanic rocks, hard or soft limestone, including island marble, which latter statuary will turn to such good account; then he had clay dried in the sun, the only kind which the mason of that day used for his structures, but when he modelled a small figure out of it, he knew that by placing it in the kiln he would ensure its durability. Finally, he had glass-pastes, cast in a mould, and ivory and bone, which the point or the chisel would carve; together with gold and silver, and the baser metals, lead, copper, and bronze; but all could be fused, and stamped or worked in repoussé, and touched up with the burin.

The Mycenian sculptor made a very sparing use of the round boss, and even when he acquired a certain sureness of hand it served him but to produce small figures. His art is seen at its best in low-relief and the modes of figuration allied thereto (Pl. XIV.). Theoretically, low-relief seems to require greater effort than work done in the round boss; in that by diminishing the depth of the bodies, the entire modelling has to be obtained by two or three plans connected with and superimposed to one another. Hence at first sight one is tempted to imagine that there are fewer difficulties to be overcome in copying the form with its three dimensions which touch and vision bring to our

cognition. But it is not so in reality. The first idea that comes to man, when the sense for plastic art awakes in him, is to copy the outline of the shadows which bodies project on the wall. does not stop there. Ere long, in order to accentuate and give more importance to the silhouette, the features of the face, the points of attachment of limb and muscle, the draping of the figure are indicated; in a word, they are worked up and made to stand out from the background. In this process we have lowrelief reduced to its simplest expression, as it was practised by nations with whom art never grew to full maturity. Such would be the bas-reliefs that cover miles of walls in the palaces of Assyria, which, thanks to the simplicity of the output, may be accomplished with extreme rapidity, although interlarded with a great abundance and variety of detail. This very elementary process can dispense with the consummate knowledge demanded by low-relief such as we find it in the Grecian art of the fifth century B.C., and above all in the Italian Renaissance, exemplified in the doors of the Baptistery at Florence. Nevertheless, even in a rudimentary stage, the artist can show how far he has a feeling for movement and form. This the sculptor of Mycenæ and he of Nineveh have both done; we shall see what brilliant qualities are displayed in the best works of the former.

As with nationalities whose education is not sufficiently advanced to enable the artist to take up indifferently any subject that may attract his fancy, here also the number of the themes upon which this art exercised itself is very small. Though conscious that he had not so much as learnt the rudiments of his craft, man at an early date desired to have domestic idols that should not only protect his abode and his grave, but amulets to be worn about his person. When, after countless trial pieces, he succeeded in rendering the human form in a somewhat less summary fashion, he tried to represent such spectacles as offered themselves more frequently to his gaze, or that struck him most. The chiefs for whom he worked spent the time they could spare from predatory or border affrays in hunting wild beasts, and thus fitted themselves for warfare. Hence it is that the sculptor shows a strong predilection for scenes of battle and of the chase. These and similar pictures, oft repeated, gave his hand suppleness and pliability, they enabled him to attack with greater confidence the human and animal

figure, the forms of plants and flowers, which he used as symbols or as purely decorative elements, be it on his weapons, furniture, or trinkets. By dint of repetition the treatment of certain forms became thoroughly conventional towards the end of this period. Although the collections of ancient objects are increasing from year to year, their number is sufficiently large even now, and differences of workmanship are sufficiently distinct, to enable the historian to mark the evolution of Mycenian sculpture throughout its existence, and define the peculiar features which single out this art from that of Egypt, Chaldæa, and Assyria, or the Greek art of the classic age.

Idols.

The series we are endeavouring to re-constitute opens with a certain class of small figures almost all of marble or terra-cotta, which can only have been idols; among these specimens some are of lead or bronze. They come from nearly every part of the Mediterranean where the Hellenic race, in historical times, may be said to have reigned supreme. By far the largest number of marble idols is from the islands, notably those lying close to Naxos, south-east of the Cyclades; some, too, are met with in Crete, Eubæa, and Chios; but they are exceedingly rare on the mainland; the single specimen that has come from Delphi is of Paros marble, and must therefore have been carried thither from one or other of the islands where marble is found (Fig. 321). On the other hand, statuettes are everywhere brought out of sepulchres, whether in the isles, at Troy, Nauplia, Tiryns,

¹ Marble and trachyte are met with at Troy. The material of the island idols is almost always a coarse-grained white marble from Paros and Naxos. The British Museum has a statuette from Carpathos of black limestone.

² Revue archéologique, 1888; Athenische Mittheilungen.

³ Athenische Mittheilungen, 1891. Nevertheless, a bit of a very similar figure of Pentelic marble was picked up on the southern declivity of the acropolis. Walpole also published a statuette of the same nature, held to have come from a grave in Attica; but the marble of which it is made is not specified. On the sites which have yielded an abundant supply of marble idols, see Dümmler.

or Mycenæ. If in the islands preference was given to marble in fashioning idols and vases nearly always found alongside of the dead, it is because there was a plentiful supply of that fine resisting substance. The simultaneous presence of marble statuettes and marble cups in these graves points to the sepulchral furniture having been formed out of the products of local industry. To me it is inconceivable how anybody could ever have attributed the fabrication and import of these idols to the Phœnicians,1 who

FIG. 321.-Idols of Paros marble. Two-thirds of actual size.

were unaccustomed to work it, for the simple reason that none exists in their country. Moreover, the idols in question have not been met with in Phœnicia itself, or on the track of the Sidonian traders, which is always recognizable by the objects they have sown on it. On the other hand, we find no remains of Phœnician wares in the prehistoric necropoles of the Cyclades.

The shapes of these idols are practically identical, be their material clay or marble. The most archaic and strange-looking specimens are made of the latter substance; a fact which

¹ The conjecture referred to above as coming from F. Lenormant, is somewhat surprising (*Revue archéologique*).

coincides with the discoveries made by MM. Dümmler and Bent, relating to the industry of the Cyclades, such as we find it exemplified in the furniture of the graves. This local industry, though much more elementary and less advanced than that of the Minyan and Achæan provinces of Thessaly, Bœotia, Argolis, and Laconia, has many points in common with it. Hence we are led to infer that the civilization of the nameless tribes of the Troad, Cyprus, the Sporades, and Cyclades preceded that of the continental Hellenes. It follows, therefore, that the first attempts to translate into a tangible form the dim notion which primitive men conceived of the Deity were made in the islands.

Thanks to recent finds, we can lead back to the first gropings

Fig. 322.—Marble idol. Two-fifths of actual size.

of the hand of the native industry, whose awkward ways are sometimes quite startling. To-day, owing to long heredity and the numerous prints and other artistic productions which surround a child from his cradle, his first attempts to reproduce form are less unskilful than those of an adult of that period. The form of apparently the oldest idols is rather suggested than imitated. We feel that the figures in question are not so much unskilful and untrustworthy copies of reality, as a sign meant to stir the soul within. Yet the meaning is so ill expressed, that but for the long series wherein we can follow the steady progress made by the artist in bringing out the type which he had dimly conceived, we should never recognize or identify it with the specimen which at last issues from his hand with no faltering gait. Thus it is

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that, whilst arranging and sorting out these countless rude idols, we succeeded in making out the human figure even in those marble and trachyte pieces, shaped like violins, which have reached us from the burnt city of Hissarlik (Fig. 322). That here the human

Fig. 323.—Bone idol. Seven-eighths.

Fig. 324.-Marble idol. Actual size.

figure was intended, admits of no doubt. Though the limbs are suppressed, the artisan has chalked in, after a fashion of his own, the head, neck, and body.² A step in advance is made in a bone statuette (Fig. 323), where the different parts of the body are

FIG. 325.—Terra-cotta idol. Half-size.

shown. The legs and arms are as yet deficient, but their point of attachment to the body is marked by a slight salience which

¹ SCHLIEMANN, Ilios.

² Our examples are borrowed from Troy; but specimens quite as rude, cut in local marble, and belonging to the first stage of this industry, reach us from the Cyclades (Bent, Researches among the Cyclades, in Hellenic Studies).

appears on either side of the bust. Again, we have an idol where these are wanting, but the chisel has traced some of the lineaments of the face; the eyes are represented by a circle, with a dot in the middle for the pupil, and the nose and eyebrows are suggested by two lines meeting each other at an acute angle (Fig. 324). Advance in this direction is shown in a terra-cotta idol broken below (Fig. 325). The face is rendered in the same fashion, but around the neck are four parallel bars, doubtless designed to represent a necklace; two dots mark the breasts, and the dress

F1G. 326.-Terra-cotta idol. Actual size.

Fig. 327.—Marble idol.

is suggested by two cross-lines on the bust, and the hair by three lines which extend from the occiput down to the waist. That this statuette stands for a female deity is proved by a very similar figure from Tiryns, nearly as rude, but where are indicated attributes proper to woman (Fig. 326). There is no improvement in the presentation of the face; but stumps, if not arms, make their appearance, and we feel that but for the trailing robe we should see the legs.

Next to these stands the group of idols which is considered to

¹ The necklace is also indicated in a terra-cotta statuette figured on p. 13, Fig. 246.

have originated in the islands, both on account of the quality of the marble of which the single pieces are made, and because they are found in greater profusion there than anywhere else. They are all, or nearly all, shaped alike; and portray a woman shown full face, with arms crossed on the bust below the breasts, and strongly-developed hips (Fig. 327). Now and again a slit marks the vulva. There is decided progress; but the workmanship is still heavy and untutored. The main lines are all there,

FIG. 328.-Terra-cotta idol. Actual size.

and we get some inkling in regard to the ruling idea which the modeller meant to express, by carrying back our thoughts to a deity once very popular throughout Asia Minor, namely the goddess who personifies the perpetual fecundity of nature. This is symbolized by the gesture she makes in pointing to her breasts, from which, under the pressure of her fingers, gushes forth the exhaustless fountain of nourishing milk.¹ The type must have

¹ Sec ante, p. 2, note 2.

sprung up in Chaldæa; whence from stage to stage it spread among neighbouring nations, and through the medium of Syro-Cappadocian populations it reached the coasts of the Ægean, where a copy of it, but a very rude copy, has been recognized in a lead idol which was discovered at Troy (Fig. 291). The figure was probably cast on the spot, if not in the Troad itself, then close by. In composition and dryness of make it bears a strong analogy to the forms seen on certain stone moulds which we have attributed to Lydia. The isles of the Archipelago were further removed than the Troad from the cradle-land of the type we are considering; accordingly, it was only known here by

Fig. 329.-Marble idol. Height, o m., 196.

characterless imitations, due to a large extent, no doubt, to their inability to model the roundness of the breasts or the open palms pressed against them. Hence the arms are reserved, and rest on the hips. Though simplified, the type did not lose its significance with the natives, for it suggested a perfect type known to them from such specimens as had found their way to the Grecian shores.² A variant on this type, both rare and droll, is furnished by a statuette which carries an erect but much smaller and very similar figure on its head (Fig. 328). It is plain, from the position given to the personages, that the sculptor intended to

¹ History of Art.

² DÜMMLER (Athenische Mittheilungen) has fully grasped its far-reaching significance.

portray a goddess-mother, accompanied by a child that will continue the chain of life. The oldest apparently of these figures have legs set close to each other, and arms attached to the bust (Fig. 327). No attempt was made to outline the natural contour of the human figure; the body is as flat as cardboard, and cut in the thinnest of marble slabs; but the proportion of the several parts is fairly preserved, except that the statuettes always have a large and curiously-pointed head and unnaturally long neck. The rendering of the general contour of the form shows marked progress; the back and lower portion of the body are slightly

Fig. 330.—Idol of compact white limestone. Height, o m., 15.
From the neighbourhood of Sparta.

indicated. Such pieces stand midway between work in the round and bas-reliefs. These, however, look as if they had no background. As soon as the chisel acquired confidence in its own power, it set itself the task of separating the legs; that this was not done without fear and trembling lest the marble should split is very apparent in Fig. 328. The lower limbs adhere to the ground, and this is seen between the legs and outside their external contour.

With greater proficiency, the artisan ceased to think about a possible danger in this direction. Thus the legs of some of the funereal statuettes are wide apart, and their arms detached from the body (Fig. 329). It is already work in the round; we feel

that the instinct for realism is slowly awaking, there is a secret desire to underline, unduly it is true, the leading features of the anatomical construction of the human form. The navel and the cross-lines on the stomach are sometimes given. These and similar points are so distinct in a series of figures from Sparta as to verge on heaviness. That they may be more recent in date is quite possible, but they none the less carry on the same tradition. The personage in question (Fig. 330) looks as if in the act of sitting down; was this due to the sculptor's lack of skill, or did he intend to represent a seated figure whose chair is gone? Who shall say? I am rather inclined to believe in the existence of a seat. Figured on numbers of archaic terra-cottas are goddesses enthroned in large arm-chairs.

FIG. 331. - Terra-cotta idol.

It is not at all unlikely that these figures formerly looked very different to what they now do, when they are deprived of the colour that served to emphasize the indications of the The terra-cottas belonging to this type are all tinted; chisel. details, either in the lineaments of the face or of the drapery, are marked by touches of red or brown pigments (Fig. 331). Several of these statuettes preserve distinct traces of colour; but even assuming that all were so decorated, we cannot be surprised that such traces should not be more frequent. hue which the ceramic painter laid on these vases and statuettes sank in the porous clay and was fixed by firing. It was quite different with marble. Rubbing would effectually efface the tones spread on the polished surface, and at best they could not long withstand the humidity of the grave. It is owing to the special dryness of the soil in some localities that certain marble pieces have preserved bits of ancient painting. Such would be a quaint specimen from a grave at Amorgos (Fig. 332), which we engrave below. The eyes are painted black; red strokes give the nose, cheeks, and forehead. A semi-circle, more polished than the rest of the surface, surrounds the top of the head; the space was in all probability painted brown to represent the hair. So too, from another grave at Amorgos, comes a figure whose head preserves scraps of colour.²

The question has been raised whether we should not infer from the lines seen about these figures that the tribes which

Fig. 332.—Marble heads of idols. Height, o m., 29.

fashioned them practised tattooing, or at any rate painted their faces and parts of the body. Patterns traced, or rather punctured, with a pointed instrument on the shoulder and the right arm of one of these statuettes, where they form a quadruple chevron, and a mæander on the left arm (Fig. 330), would seem to confirm the conjecture. The usage has ever been and is even now widely diffused among savage peoples. We learn from classic historians and poets that in their day the habit was still popular with the Thracians. It is self-evident that when the ceramists of a later age put dashes of paint on Orpheus, whom they pictured torn by infuriated Thracian women,

¹ WOLTERS, Marmorkopf aus Amorgos.

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it was in allusion to this very peculiar custom. It requires some effort of the imagination to picture to ourselves the ancestors of the Hellenes going about with tattooed and painted bodies like Red Indians. But as we handle the rude tools of stone and bone which for centuries were the only implements known on the coasts of the Ægean, we must fain surrender to the logic of facts, and the evidence furnished by recent finds from these same graves, where by the side of the figures in question were found large balls of colouring matter, intense blue and deep red, which doubtless were remains of pigments used in painting the dead at the time of interment. The persons to whom they had served after death, had employed them during their lifetime to trace on the face, arms, and breast patterns of many colours, which varied

Fig. 333.—Fragments of terra-cotta idols.

from one individual to another. These, it may be, were the sole adornment of the tribal chiefs in the opening of the archaic period. Most of the figures are but from fifteen to twenty centimetres in height; but the rich collection preserved in the Athenian Museum contains several specimens double that size; the biggest of all, as far as I know, reaches one metre fifty centimetres in height; the length of the face alone being twenty-five centimetres. The head in Fig. 332 exceeds this by four centimetres; that is to say, we have here a specimen with almost the normal stature of woman. They were real statues. Such tall simulacra as these could not be placed in graves which, as a rule, are one metre twenty centimetres at the side; accordingly, like most Argolic vases collected in the rock-cut graves, they are found

broken in twain, the head being separated from the body. In this collection I noticed two figures that may possibly belong to the male sex, but am not quite sure; on the head of one is a conical cap. It is an indubitable fact that if a male deity makes here his appearance with the early attempts of this art, and in Peloponnesus towards the end of the archaic period, it is equally certain that the male type was far less common than the female. The latter never lost its hold on the imagination and regard of these peoples. If its characteristics are confused

FtG. 334. -Terra-cotta idol. Height, o m., 128.

and ill-defined in the broken terra-cotta idols that came from the third settlement which was excavated at Hissarlik in 1890 (Fig. 333), the curious clay variants of this type found in the Argolic vaults are far more distinct. Here is a woman with a babe in her arms (Fig. 334); a flat cap, clearly the prototype of the \$\pi\0\cdot

was it a net designed to hold a second infant? There we come across a glass-paste which shows enormous advance on the clay figures, and must therefore belong to the last days of the Mycenian period (Fig. 335). The modelling of the face is good, and decidedly clever; but the rendering of the limbs and the form generally is as arbitrary as of yore; the former lack consistency. and the latter bears no resemblance to reality. The neck is encircled by a single row of beads; the fore-arm and hand are expressed by a curve of geometrical precision, a simple stroke void of breadth, but which, to the artisan of that day, seemed to suggest plainly enough the traditional gesture of the Asiatic



Fig. 335.--Idol of glass-paste. Actual size.

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F16. 336.-Glass-paste idol.

goddess. A triple row of vertical bars marks the dress. The same conventional treatment is observable in the tail-piece at the end of the chapter; its chief characteristic is the abnormal = 3333 size of the breasts; but the arms surrounding them are a mere rectangle. If the features of another and smaller glass-paste are barely outlined, the arms are much better drawn (Fig. 336).

The arts of the mainland were carried on different lines and with different materials than those of the islands. The Argolian artisan could not command a substance as durable or as easily carved as marble; hence he gave the preference to clay, and as soon as he had acquired proficiency in his craft, occasionally to bronze or lead. Then, too, the advance of civiliza-

¹ Tsoundas. A very similar idol has been found at Mycenæ. It has no arms, and the infant looks as if glued on to the mother.

tion and consequent wealth induced the habit of draping the goddess. This may have arisen in part out of the natural and simple desire to adorn and deck out their beloved deity in all the finery procurable at that period; and in part because the nudity of the marble figures shocked their awakening sense of refinement, as savouring of rude and unlettered days. The changes of fashion may be traced on the skirts of these idols, their only article of dress. The next step was to entirely cover these clay figures, whose arms and legs disappear under

Fig. 337.—Terra-cotta idol. Actual size.

their ample, trailing robes. The artificer did not trouble himself to detach and model the limbs; he concentrated all his efforts to marking with dashes of paint the brilliantly-hued stripes of the drapery. Now, simple vertical bands outline the bust, to reappear more widely spaced below the waist, the latter being always indicated (Fig. 337); now horizontal bands surround the arm, and a polos rises behind, shaped somewhat after the fashion of a college cap (Fig. 338). Other arrangements and other patterns are seen elsewhere. Thus, a small figure from Bœotia presents

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the same characteristic form which we have just described, but more rudely modelled, except that two plaits fall on either side of the face, and that the neck is enclosed by a double row of beads. Stripes, contrary-wise arranged into a pattern, adorn the bust. A full flounce covers her feet and ankles (Fig. 339). At Tiryns, on the other hand, across the bust appears a broad scarf; whilst the lower portion of the petticoat is taken up by a triple band whereon is beheld a herring-bone pattern (Fig. 340). From the same locality comes a statuette

Fig. 338.—Terra-cotta idol. Actual size.

which Schliemann coloured and published (Fig. 341). The head and arms are gone, but the existing parts reveal an art which has made great strides forward. The body, like that of the preceding image, is swathed in a scarf; the pattern on it is made of squares formed by intersecting lines, and of circles in slight relief. These doubtless represent ornaments, whether metal plates or glass buttons, sewn on to the vestment. Should we identify this gaily-arrayed goddess with a marble specimen whose significant gesture leaves no doubt as to her character? To this query a conjectural answer can alone be given. It

is impossible to arrive at any clear notion in regard to beliefs that we only know by very imperfect simulacra, upon which neither myth nor poetry have shed any light. The only thing which would incline us to believe that some sort of differentiation then began to be made between the gods is the advanced character of the Homeric theocracy. In it the dii majores, in whom the Greeks saw personified the forces of nature, or rather the laws regulating its phenomena, are delineated with

Fig. 339.—Terra-cotta idol.

great precision and distinctness, each standing out from among his fellows. To have reached such a stage, namely, the division of attributes between the several gods and goddesses whom Zeus takes into his counsels on the Olympian heights, implies centuries of reflection, during which the crude notions of a former age had passed into the abstract phase. It is not unlikely, then, that this silent process was already at work in the Mycenian period, and that some at least of the gods who watch, with no indifferent eye, the battles fought around Troy, were worshipped

and implored by the builders of Tiryns and Mycenæ with the names they bear in the *Iliad* and *Odyssey*.

The female deities from the Argolic graves fall naturally under three heads. There is first the goddess clothed in a long tunic, whose arms are more frequently outstretched than crossed on the

FIG. 340.-Terra-cotta idol.

bust (Figs. 331, 333, 338, 339, 340, 341). The goddess with a babe is but a variety of this type (Fig. 334). Then comes the goddess on the golden plates from the Mycenian acropolis, whose character is defined, as in the Euphrates Valley, by the doves hovering about her (Figs. 289, 290). In order to verify the Oriental origin of this type, we have only to place by the side

of it, as has been done, the pair of Mycenian simulacra, and an engraved cylinder from Babylon (Fig. 342).1 The principle, as

Fig. 341.- Painted terra-cotta idol.

far as the birds are concerned, is precisely similar; the difference appears in the movement of the arms; these, in the intaglio, are

Fig. 342.—Cylinder of hematite.

stretched out as if the goddess were drawing towards her a long wreath, or more likely a veil, of which we only see the outline fall
1 F. LENORMANT (Gazette archéologique).

ing down behind, and which she is re-arranging about her. The head-gear, however, is identical in the three figures. Finally, a fragment shows us a third type which must have borne a different name and meaning from the above; it represents the upper part of a woman strongly relieved against two huge wings (Fig. 343). We know from the frescoes at Tiryns what part winged figures played in the decoration of the palace; if those figures are entirely obliterated, save the wings' plumes, we are aware of their outward look from a terra-cotta. Again, another clay statuette (Fig. 344) helps us to put a body to ivory wings that have been picked up at Mycenæ. A fourth type, less easily defined, is

Fig. 343. - Terra-cotta idol.

perhaps represented by a bronze figure which we engrave full face (Fig. 345) and sideways (Fig. 346).² Its origin is doubtful, but it is said to have been found in the Troad. The workmanship is far superior to that of the marble and terra-cotta idols. The features of the face are indicated in a very summary fashion; but the arms and bust exhibit so marked an advance, that at first sight one is tempted to class it among objects of a more recent date; the characteristic arrangement of the costume, however, permits us to place it in the archaic period. Subsequent Greek statuary will never again show us a skirt made up of two or

¹ SCHLIEMANN, Tiryns.

² The figure in question was only known from a sketch printed in the *fahrbuch*. VOL. II.

three superimposed bands or flounces. This peculiar arrangement appears on countless Chaldæan and Assyrian cylinders; we again find it, in a slightly modified form, in certain frescoed fragments, on ivories (Figs. 347, 348), and a number of figures



FIG. 344.-Ivory wing. Actual size.

engraved on gold signet-rings from Mycenæ, or on semi-precious stones which went to the making of bracelets and necklaces (Pl. XVI. 5). Whether the fact is due to transmission, imitation, or chance matters little; one thing is certain, that the fashion

went out after the Mycenian period. Nor should the broad salient band seen around the hips of this image be unnoticed. A scarf, also in relief, falls from the waist and reaches the flounces below. The rendering may be different, but the device is the same as that of our clay statuette (Fig. 338). Elsewhere, in this same series, we come across a specimen with loose hair falling

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FIG. 345.—Female statuette of bronze. Height, o m., 19.

low behind (Fig. 334). But the single plait of the shapeless clay doll is quite straight. In the bronze piece a more cunning art has gathered the hair into a knot on the top of the head, and then parted it into two plaits which reach the middle. On being taken out of the mould, the figure was touched up with the burin, to indicate here the outline of the twisted hair or the shadow on the bosom, there to mark, by criss-work, the woollen nature of the fabric.

Despite great precision of drawing, the meaning of the gesture made by the figure in question remains obscure. The upper part of the body is slightly bent forward; the left hand is laid on the shoulder, and the other hand, which is open, is used to screen the eyes. The sign must body forth a religious ceremony whose import we fail to grasp, for want of literary information.

Fig. 346.—The same statuette seen sideways.

The movement of the right hand is that which everybody makes when suddenly confronted by too dazzling a light; the eyes are shaded to protect the retina against a splendour which hurts and is painful to it. Was this automatic movement adopted in that period as a conventional expression of the respect felt by the faithful as he entered a sacred place, and found himself in the presence of a simulacrum of the deity, when he would make a screen of his hand and shield himself against the awful im-

pression made upon him by the apparition? If the hypothesis be allowed, the statuette would not represent a goddess, but a worshipping priestess. A second conjecture is yet possible. Everybody knows that the eye sees better and farther when sheltered from the blinding rays of the sun. Was the attitude meant to indicate a far-seeing goddess, before whom the heart of man is an open book, who reads the past, the present, and the future—

Quæ sunt, quæ fuerunt, quæ mox ventura trahantur?

In the marble statuette series, male figures are exceedingly rare, and of a somewhat confused character. Hence it cannot

Fig. 347.—Fragment of ivory tablet.
Actual size,

Fig. 348.—Ivory fragment of idol, Actual size.

be advanced with certainty that the islanders had evolved a male deity at that early date; but the type was certainly in existence in the palmy days of the Achæan lordship over Argolis; for we find a male god represented, with insignificant modifications, on two small bronzes, one from Tiryns (Fig. 349), and the other from Mycenæ (Fig. 350). The personage stands erect, as if walking, his left foot carried boldly forward. The right arm, bent at the elbow, is raised and thrown back, as if brandishing a spear. The left arm, which is outstretched and level with the waist, carried

¹ It is figured by Schliemann (Tiryns). But a better drawing of it appeared in the 'Εφημερίς; where, too, M. Tsoundas brought the Mycenian specimen to the knowledge of the world.

perhaps a shield.¹ Spear and shield are gone; but a proof of their existence is afforded, at least for the Mycenian statuette, by a slight indentation seen on the fore-arm, close to the elbow, which marks the place where the shield rested. Even without this, the whole attitude of the figure is so expressive and spirited as to suggest a bellicose action. On the head is carried a helmet terminating in a large button. There is no button at Mycenæ, whilst the surface of the Tirynthian figure is seamed by horizontal striæ. Fastened round the waist is a broad band, which serves to fix a square piece of cloth, passed between the

Fig. 349.—Bronze statuette. Height, o m., o5

legs from the back, and caught up in front. As numbers of antiquities will show, this species of drawers was the only item of dress which the men of that day wore during their active life, in the chase or war. We rather guess than see it in the Tirynthian bronze; but it is discernible in the Mycenian specimen, and quite distinct in a small lead figure from Abbia, in Laconia, where it was discovered among the ruins of a domed-

¹ M. E. Gardner sees an abbreviation of the armed god in certain stone objects which have been collected at Mycenæ and elsewhere, nearly in the shape of a shield formed by two circles slightly intersecting; in our opinion he has failed to invest his hypothesis with any great degree of probability (*Palladia from Mycenæ*, *Hellenic Studies*).

tomb (Fig. 351). Such we may picture to ourselves was the accourrement of the companions of Achylles, as they made trial of their strength around the funereal pyre of Patroclus, or that of the athletes who will contend for those chaplets given to reward strength and agility at the great Hellenic games. Complete nudity did not come in until the thirtieth Olympiad. We

Fig. 350.—Bronze idols. Actual size.

have this same scanty costume in a glass-paste, representing a soldier on the march (Fig. 352). The lower part of the figure alone remains, and a bit of the border of said drawers is seen on the thigh.

It cannot be denied that there is a curious analogy between the pair of small figures from Tiryns and Mycenæ on the one

¹ See ante, Vol. I. p. 408.

hand, and a bronze statuette uncovered at Tortosa, in Northern Phœnicia.¹ The movement is the same, and the head-dress and costume have many points in common. It is very possible that, like the nude goddess pressing her breasts, the type of an armed god may have come from Asia Minor; do not we find features that would suit a warlike character in a certain class of bronze statuettes—in make vastly inferior to those of Phœnicia and Argolis—in which we recognized the work of Syro-Cappadocian tribes?² At any rate, even if we accept the hypothesis of a plastic theme which was carried across the Ægean on to the European continent, we have no reason to believe that the two

Fig. 351.—Lead statuette. Height, o m., 114. Fig. 352.—Glass-paste scrap. Height, o m., 037.

specimens we have just described came to Argolis from without. The workmanship of these three bronzes is both different and superior to that of the Phænician piece. There the figure stands well; the limbs are fuller, and the body has greater breadth. Greek genius seems to have begun to put its individual mark on all it makes its own. Notable differences are also observable in the costume. The shape of the helmet is not alike in both. The loin-cloth of the Tortosa specimen does not cling to the form as at Mycenæ, nor is there a band which serves to fix the garment in front. Like the Egyptian shenti, it is no more than a piece of stuff fastened round the waist. The three pieces

belong to the closing days of the archaic period. What gives an air of remote antiquity to the Mycenian examples is their having preserved the metal jets—whereon rest the feet of the personages—which correspond to the holes through which the metal was introduced into the crucible. Had the chisel or file removed these appendages, as in the Abbia piece, both the bronzes and the lead statuette would appear much younger than many of the oldest bronzes that have come from Olympia. The sculptor who modelled these pieces has certainly yet much to learn; but his progress will be rapid, unless arrested by some unforeseen accident in mid career.

Was the Abbia figure, whose intrinsic merit from an artistic standpoint singles it out from among its fellows, also a divine simulacrum? It is impossible to say. The action is complicated but not intelligible, and is never met again in any other object of that period. It vaguely recalls an athlete who rubs himself with a flesh-brush. As far as one can see, it has no ritualistic and consequently no religious meaning. If we have placed this figure in the idol series, it is because it helps us to define certain details of the costume. As regards the other statuettes, we think we have attributed to them all, from the most barbarous to those showing the greatest advance, the destination which their makers intended for and which pertains to them. One main reason for thinking that all are idols is this: Everywhere, as soon as the artistic sense awakes in man, the first boon he demands of it is that it shall enable him to exorcise the secret terrors which beset his troubled soul. To this end he procures fetiches, that is to say, objects wherein, he fondly imagines, are incorporated those mysterious forces whose thrall he cannot shake off, whose whims he perpetually dreads. This result he hopes to obtain by fashioning a form that shall approach as near as possible his notions of the Deity. As soon as he is capable of rough-hewing trachyte or marble, he carves in it the simulacra of his gods, so as to bring them close to him, and compel them to bear him company in his travels, and follow him, as benevolent patrons, to his last The inhabitants of the coasts of the Ægean, like the vast majority of peoples, represented their gods under the semblance of man. In their anxiety to secure the benefits accruing from the possession of a tutelar fetich, they did not wait until they had gained some knowledge relating to the build of the

human body, to turn out an image with some approach to reality. At first they were content to endow pebbles with a slightly conventional and symmetrical shape; so that, hieroglyph-wise, they brought up to the mind the living figure which no one as yet knew how to imitate. Then, by degrees, the hand acquired more firmness and suppleness; the ideal aimed at became less imperfect, and the sign assumed the value of an image; so that the rendering of the latest idols is fairly natural. Remembering the ascendency which religious feeling exercises over the susceptible and simple mind of unsophisticated folk, and the terrors and emotions it stirs within their breast, one readily grasps how this feeling should have prompted man at an early date to painfully and arduously imitate the living form. Among the plastic works that may safely be ascribed to the tribes that preceded the Hellenes in the Eastern basin of the Mediterranean, none come up, in uncouthness, to those which open the series we are considering; there are none which take the historian so far back as these, where he feels that he stands on the borderland of initial barbarism. Hence he is justified in considering those statuettes that look most archaic in the light of idols, and, as a necessary corollary, other figures, of certainly more recent date, but which owing to identity of types are connected with the earliest links of a chain that maintained itself there without a break through various modifications of detail and progressive practical knowledge.

Divine simulacra, of no matter what nationality, are all distinguished by uniformity of attitude, of costume, and attributes, these being repeated without a change from one figure to another. To-day, as in those remote times, pious people do not relish being disturbed out of their confirmed habits. The image wherein they place their greatest confidence is that before which their ancestors have knelt in prayer; changes in the workmanship, which progress brings in its wake, are only introduced by slow, imperceptible degrees, and with great difficulty. We have called attention from time to time to the constant and ever-recurring shape, the unvarying posture and costume which we meet in all these images. The impression that these figures had a symbolic and religious value would have been brought home to the reader with greater force, had we been able to exhibit all the pieces that are preserved in the Athenian museums for

example, instead of a very small number of statuettes, however carefully selected they may be as specimens of the class.

But what serves to dispel any lingering doubt, is the situation given to these images by their makers. Some, having got out of their original place and having been thrown in the refuse heap at an early date, have been picked up in the ruin and soil of ancient cities; but nearly all, whether marble or clay figures, have come from sepulchres. What part they played, and why they were placed there, is not difficult to grasp. Portraits of the defunct, like those pictures we find in the shaft-graves and the serdabs of the mastabas of the ancient Empire, they certainly are not. The art of these tribes was not advanced enough to take so bold a flight; besides, how is it possible to identify the owner of the grave with the nude female figure which in the vast majority of cases is found in the grave? Unlikely in itself, the assumption is inadmissible in the case at issue. The statuettes are not unfrequently from graves wherein arrow-heads, knives, and other objects pointing to the presence of tribal chiefs had been deposited. The statuettes found in the prehistoric graves of the Archipelago and of Argolis fulfilled a very similar function to that which was ascribed to those small figures of limestone or earthenware placed in Egyptian hypogæa by the friends of the mummified defunct.2 According to Egyptian belief, oushebti or sponsors were told off to help the dead till and sow the fields of the subterranean world; here the goddess of life and fecundity protected man during the short span of life which he passed in the light of the sun, and then descended with him into the grave to defend him against the perils of a shadowy and unknown region.

To this series may be added two figures from the islet of Keros, near to Amorgos (Figs. 353, 354); one is a flute-player, the other twangs a string instrument. There are no clear indications as to the sex to which they belong, but we may take it for granted that men were meant. Are these gods? We

¹ T. Bent, in his paper entitled *Researches in the Cyclades*, found two small figures in one of the graves at Λntiparos, and he raises the question whether they were not meant to represent man and wife (*Hellenic Studies*). But as nothing about them denotes difference of sex, his view must fall to the ground. He adds a little further that he came across many more female than male figures.

² History of Art.

³ U. Köhler, Præhistorisches von den griechischen Inseln (Athenische Mittheilungen).

think not; we are rather inclined to recognize in these people musicians addicted to the service of the goddess, of whom two effigies were found in the tomb whence have come these quaint statuettes. They are the outcome of the same industry as the idols with arms crossed on the breast; like these their material is marble, and if the attitude is a little more studied, the workmanship is quite as rough. The heads have no human

Fig. 353.-Marble statuette of musician. Half-size.

semblance, and are thrown back, the nose alone being indicated. The proportion of the parts is shockingly bad; the double flute is much too big for the mouth, which is marked by a single stroke. The posture and appearance of the figure are coarse in the extreme, not to say bestial. The body is stripped, but a piece of cloth wrapped round the loins and passed through the legs is vaguely indicated. The flute-player is erect, and the second is seated on a high-backed stool. Although undoubtedly carved by the same hand, the last figure, compared

with the first, is less rudimentary, and the arrangement of the limbs evinces greater skill. The feet and part of the legs are broken, but they were firmly planted on the ground. In the left hand is held the instrument, which rests on the right thigh; the other hand, now broken, was stretched towards the equally-absent strings. The harp-like instrument, which is larger below than above, where it terminates in a swan's neck of a purely

Fig. 354.-Marble statuette of musician. Half-size.

ornamental character, is no other than the σάμβυξ or σαμβύκη, to which the ancients ascribed a Syrian origin. Another tomb has furnished a less well-preserved harpist, and the British Museum contains several stone figures from Camiros representing flute-players. The manipulation is a little less archaic than that of the Cyclades statuettes; their fabrication and the material of which they are made bring them near to the Cypriote examples. That these islanders were more polished, and provided with far

better mechanical appliances than one would be tempted to believe from the rough appearance of their sculpture, is proved by the existence of these instruments. Whether or not they originally borrowed the $\sigma \acute{a}\mu \beta \upsilon \xi$, like their deities, from the populations of Asia Minor, it is certain that they had a music of their own; and, in all likelihood, religious chants sung to the accompaniment of musical instruments. In other words, they had left barbarism far behind them.

Modern historians, taking literally certain statements to be found in ancient writers, to the effect that the flute and the music allied thereto were introduced into Hellas at a comparatively recent period through the medium of Ionian cities situated in the Hermus and Mæander valleys, in relation with Phrygia, where tradition placed the origin of the instrument, have often seemed disposed to believe as an established fact mere passing allusions that will not bear looking into. Our statuettes demonstrate that the borrowing, if there was borrowing, leads back to a more remote period, of which tradition itself had preserved no remembrance.

Representations of Human Life, relating to Scenes of Battle and the Chase.

Among all the finds relating to the plastic labours of the tribes settled on the shores of the Hellespont and the Cyclades, the pair of musicians are the only figures which do not bear the character of idols; nevertheless, they may be held to belong to the simulacrum of the goddess, in that they represent worshippers who honour her with their songs even in the world of shades. In Eastern Hellas, especially Argolis, where was laid the scene of the unfolding of this primitive civilization, plastic art enlarged the field of its aspirations and creative activity. But it did not cease on that account to produce divine images without number. Yet in so doing, if it modified them at all, it was so exceedingly slowly as to render the change imperceptible except in the most recent images, those belonging to the last days of that period, and consequently the most advanced. These societies,

capable of an effort such as that which is implied and was necessary for building the walls of Tiryns and Mycenæ, felt early the need of employing nascent art to perpetuate the remembrance of princes whose influence and wealth were far superior to those of the petty island chiefs. Portraits, in the strict sense of the word, were not to be thought of, but in default of this the sculptor and painter sought to preserve green the memory of the main episodes in the warlike and adventurous life of their kings, conquerors, and pirates, mighty hunters of lions and wild bulls, every man of them. The oldest monuments due to this innate craving are stelæ rising over the royal graves of the Mycenian acropolis. One of these stelæ, with a mæanderlike pattern, is shown in Fig. 252. This, it is conjectured, not without some show of reason, covers the tomb which in antiquity went by the name of Cassandra. Mycenian pundits may have recognized in the volutions of its unending curves those snakes which, said tradition, kept the ears of persons beloved by Apollo open, that they might hear coming events.1

The stelæ, whether whole or in a broken condition, have been recently subjected to a minute study at Athens by Reichel. The collection consists of five sculptured stelæ almost perfect, and twenty-nine fragments. Of these nine have remains of figured decorations, whilst designs of a purely ornamental character appear on the rest. Reichel's attempts to form four other stelæ with the several broken pieces were without result; for not only are the bits too small and therefore more or less meaningless, but the gaps are much too large to permit of a restoration being made. This would have brought up the total number of the stelæ to nine; that is to say, to that of the bodies contained in the pits. Plain cippi, without figuration or mouldings, are held to belong to women and children. The single stela which has been restored, though smaller-forty-seven centimetres broad by one metre two centimetres deep-greatly resembles that of Fig. 252. Close inspection of these antiquities has brought out the fact that Schliemann's illustrations leave something to be desired. course, being engraved from photographs, they reproduce the character of the form and the grain of the stone; but certain

¹ WOLFGANG REICHEL, *Die Mykenischen Grabstelen*. The volume is entitled, *Eranos Vindobonensis*, published on the occasion of the forty-second Congress of German savants.

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details are rendered indistinct by the play of light and shade; whereas the archæologist can "feel" and hold up the piece itself to every light, and thus often succeeds in detecting shades of meaning where mechanical appliances have failed. Hence it is that Reichel's linear drawings from the original stelæ contain every stroke ever traced by the chisel. Despite their meagre appearance and want of breadth, we shall turn to them whenever they are found to supplement lacunæ in Schliemann's engravings.

We will begin with the most ornate of the cippi, that which stood over the fifth grave. The upper part of the stela is gone; the field containing the figures is bounded at the sides by spirals, and filled up below with three narrow plain bands, separated by as many salient bars. Towards the top of the picture is a chariot mounted by a man. The chariot-box is quite low, and seems to rest on a four-spoked wheel. Jehu is fully armed; his right hand rests on a dagger stuck in his belt, and his left holds the reins, which are plainly seen between the hand and the galloping horse, under whose body appears a prostrate warrior. We shall meet again in other works the great shield which conceals the whole body of the fallen warrior, and reaches to his chin. We see lines on the face that may perhaps stand for a crested helmet. Beneath this group are two more figures, a lion seemingly in pursuit of an antelope, with a short tail and long horns; the latter animal returns in other monuments of this art. Moved by the horror vacui, the artist filled the remaining space (Pl. XVI. 1),1 on the left with some kind of bush, whilst big dots, irregularly spaced on the right, are perhaps meant for stony ground. The rocks figured on the Vaphio vases are rendered in pretty much the same fashion (Figs. 362, 363, and Pl. XV.). We have very similar representations on a pair of stelæ belonging to this same grave. One is almost complete; at any rate nothing is wanting to the picture which forms the interest of the cippus (Fig. 355), and which is enclosed by a double listel. Another narrow band interposes between the bas-relief and a space covered with spirals joined to one another in elevation and plan. The chariot,

¹ In Schliemann's engraving we see the hair of the mounted warrior, and perhaps a waving plume on his head. At this point, since then, a piece of the stela has come away, and the detail can no longer be tested. On the other hand, the warrior who has fallen on his back is invisible in Schliemann's drawing.

which is very low and unfinished at the back, is mounted by a very young man, whose head and shoulders appear above the

FIG. 355.—Stela of limestone. Height, 1 m., 80; width at the bottom, 1 m., 15.

chariot. In his right hand are held the reins, the left grasps a great sheathed sword, having a huge pommel, which hangs vol. II.

from a leather strap passed over the shoulder. In front of the chariot is the figure of a naked man, with a pointed beard; he is facing the charioteer, and is apparently threatening him with a long sword. Faint traces of the harness appear on the horses' body. The empty space above and under the horse, as well as behind the Jehu, is filled with spirals.

In a third stela the same division is cut up into two compartments; here, however, the decorative forms, which consist of a pair of circular medallions, are placed below; the pattern resembles that of one of the gold plates discovered in these graves (Fig. 356). In the upper section, part of which is

Fig. 356.—Gold plate from Tomb III. Actual size.

broken off, is a chariot drawn by a horse in full gallop; here chariot and driver are on a smaller scale than those depicted on the preceding cippi. Behind the chariot-box is an object respecting which opinions are divided. Is this the back part of the chariot, or a sword fastened at the side of it, as in certain Assyrian war-chariots, which the hero can snatch up in case of need? Against this assumption is the fact that there appears, on the original, a continuous broken line between the chariot and the dagger-shaped object. We incline towards a third conjecture. The artist of this stela, lacking the skill of him who had carved the preceding cippus, was incapable of managing the sword at the warrior's side; yet he wished to recall

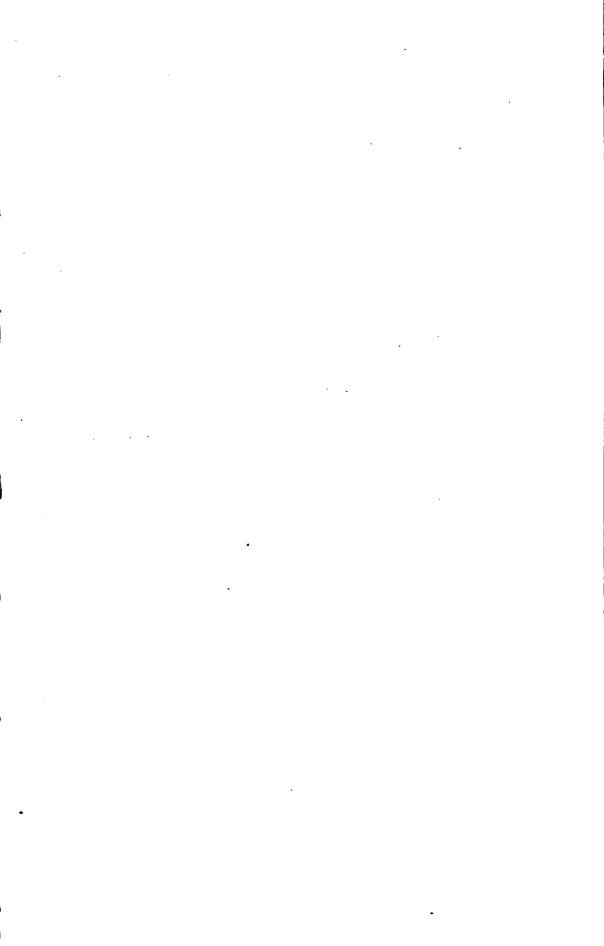
the dread weapon which the hero had known so well how to handle. With the boldness of youthful inexperience he stuck it where he could. Clearly it was the spectator's affair to replace it in the hand accustomed to wield it against the common foe. The drawing on this stela is more incorrect than in any other; the head, and perhaps one of the driver's arms, are missing, so that the difficulties of reading the scene are much increased. The remaining hand holds the rein; was a spear grasped in the left, and levelled at the figure of the man in front of the horse? Or were the parts reversed, and did the foot-soldier brandish his weapon against the charioteer? A main reason which would lead me to discard this hypothesis is that I cannot conceive it possible that the sculptor would have left the spectators to puzzle out as they might the issue of a combat in which the prince was engaged. Attentive examination of the original leads to the inference that he who handles the spear is the owner of the chariot. His lance stops short as it meets the foot-soldier, to re-appear behind his back. All the probabilities, then, are in favour of our explanation. The scene is a war-scene, in which the king is represented spearing his adversary, whom he has overtaken owing to the swiftness of his horse.

A fourth stela is incomplete; the whole of the left division has been broken off. By piecing together the extant pieces Reichel has made up three horses enframed by scrolls who are seen galloping towards the right. They stand one above the other, because the artist was unable to place them on the same plane. We have adverted more than once to such a conventional perspective which crops up here and there among different nationalities. Another fragment shows the fore-quarters of two horses.1 This has also been published by Schliemann, but he failed to grasp the whole figuration. Did there exist a chariot or a warrior on the missing part to the left? We know not. A horse running full gallop is the only distinguishable item on a bit from a fifth cippus; whilst a man's arm, who brandishes a great sword, and the hind legs of a horse belong to a sixth. We divine here a scene similar to those just described. The remaining fragments are so small that they cannot be put together to form a continuous ornament or figure; they show here a wheel, there indications in the different attitudes of men engaged in racing or fighting. One man, however, is kneeling.¹ His right hand is folded on the breast, in the other is carried an object which cannot be made out, because the stone breaks off here. Is the circular shape a chariot-box, or a wheel, or a shield? It is impossible to say. On a piece from the upper portion of a stela—unusually coarse in execution (No. 13 in catalogue)—we see a chariot and a long spear above the reins; this was certainly grasped by the driver, for there is no space for a second figure in front of the horse, since his head touches the frame of the picture.

Differences are observable between these stelæ which at first were not sufficiently taken into account.2 In the first place, they are not all of the same stone. The foremost cippus is cut in the soft calcareous stone that forms the subsoil of Mycenæ; most are of hard limestone, like the slabs of the funereal circle, and one fragment is red (No. 12). The same may be said of the workmanship, which varies from one cippus to another. The surface within the contour bounding the figures is always flat; we find neither superimposed planes nor attenuated roundnesses answering to those of the figured bodies; the forms are indicated by a simple outline. Figures and ornaments are admirably set off by the carefully-polished surface of the stelæ. These are enclosed by an incised line, nearly one centimetre deep. The exception to this general rule occurs in the stela on which are figured the lion and antelope; the surface is scratched rather than frankly attacked as in the corresponding cippi; roughhewn with blows irregularly spaced and of varying depth, which are dealt with a great hammer, as will be seen by a glance at the annexed sketch, engraved from a photograph (Fig. 357). If certain details found in Reichel's drawing, to which reference was made above, are to seek here, the lacunæ are made good by the excellent rendering of the background. The apparent carelessness is all the more extraordinary that none of these bas-reliefs can show a better drawing than this stela; nowhere is the shape of the chariot indicated with so sure a hand, the position of the driver so natural, the elongated body of the lion and the horse—as required by running animals—so well marked as here. The antelope alone has not been well hit off. In despite of this slight defect, had the contour been chiselled with the mastery which we find in

¹ Mycenæ.

² Reichel, Die mykenischen Grabstelen.



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the other stelæ, this would undoubtedly rank among the best works of Mycenian art. We may regret that the sculptor should have failed to do this, since it would have ensured durability to his work. To account for this apparent contradiction, we have only to remember how extensively the Mycenian architect utilized lime coatings to decorate his edifices. The elaborateness of

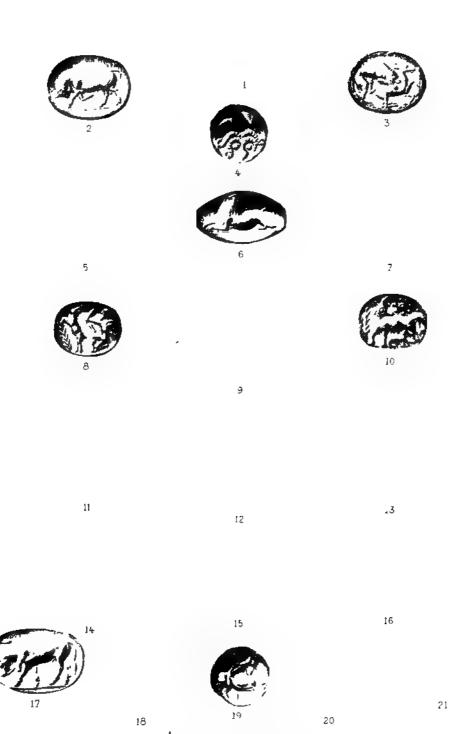
F16. 357. -- Stela 1.

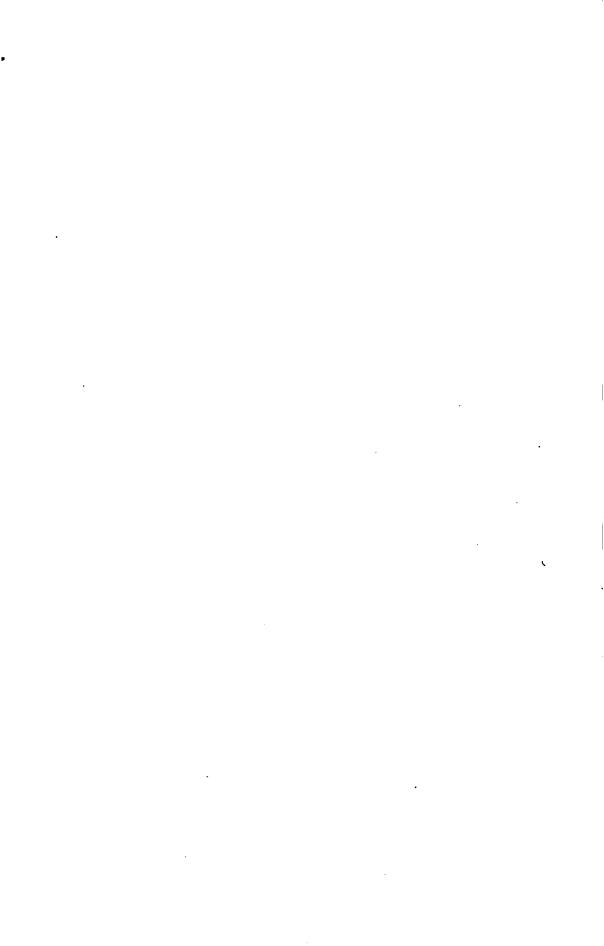
the work and other reasons prove that the artist employed here all the resources at his command. The surface, left purposely rough, was overlaid with a thin coat of plaster; this not only served to conceal the unlovely state of the background, but was a capital vehicle for colour. Hence we may assume that additional cunning touches were put in with the brush to complete and accentuate the form, as on the Vaphio vases (Figs.

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362, 363, and Pl. XV.), or that delicate strokes were traced with the point, as on the daggers from Mycenæ (Pls. XVII., XVIII., XIX.), where they contribute not a little to the fine modelling of the figures or to sharply define accessories. Time and the weather have wrought the destruction of the stucco lining, and left us with a sketchy bas-relief, a composition which gives but an imperfect idea of the intrinsic merit of the sculpture and of its original effect. This conjectural view of the case is the only one that can with any plausibility be put forward to explain away the peculiar anomalies surrounding this stela, which Reichel has forcibly brought to our knowledge. If, as is not improbable, the stone of the other stelæ was also protected by a lime facing, it is self-evident that stucco did hot play the same part on the well-prepared surfaces of this cippus as it did on that of the first stela. On the other hand, the main thing that strikes the beholder is the inferiority, from an artistic standpoint, of the carved figures seen on these cippi, compared with those of the first one. In the cippus with the spear the feet of the driver appear above the sides of the chariot; an error which the engraver avoided in a very similar representation beheld on one of the finest specimens of Mycenian glyptics (Pl. XVI. 9). The charioteer, in the stela with a man running in front of the horse, looks as if at any moment he might fall forward; whilst the proportions of the horses are unnaturally large. Finally, the work of some of the fragments is more like shockingly bad engravingthan sculpture (10, 13 in catalogue). Reichel is inclined to view the stela on which we have laid so much stress as perhaps the only one which dates from the interment of the bodies buried below. Agreeably with this hypothesis, most of the other stelæ were re-handled when the slab-circle was set up and when the Lions Gate was built, doubtless with a change of dynasty. This conjecture we cannot accept. The domed-tombs are certainly coeval with the imposing bas-relief which is still admired at the entrance of the acropolis, and nothing about them betokens a decadent age. As demonstrated by the Vaphio vases, and other objects from the domed-graves of Attica, they knew how to draw the figure of a man or a horse with a precision not to be found in the sculptures seen about the stelæ which we are invited to consider as most recent. Had the cippi been touched up at that epoch they would not bear traces of a clumsiness wrongly taken

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as a sign of their comparatively recent date; on the contrary, we should find the mark of the firm style which characterizes the most important work bequeathed to us by the Mycenian chisel (Pl. XIV.). What we must understand by stelæ where the drawing is most faulty, are trial pieces of the stone-carver, who, for reasons we shall presently adduce, is more backward than the goldsmith. This is proved by the ornaments associated with the figures of these sculptures, wherein is manifest the same taste which pervades the vases and the jewellery that have come from these graves. The stone-cutter has copied the forms which the metal-worker executed in bronze, in silver, or in gold wire, previously rounded off with the tool and applied to his backgrounds. We have already compared a gold plate from one of the pit-graves, adorned by twisted wire, with the sculptured medallions of one of the stelæ similarly decorated (Fig. 355). We find again and again imitation of wire-ornament, whether in the paintings seen about the walls of Tiryns, the ivories from Spata, or the Mycenian ornaments (Figs. 219-222). The stelæ, then, were carved and set up with each successive grave. These were at first separated, each constituting a mound by itself, but in the end they came to form a single great tumulus, over which was placed the slab-circle.

The several cippi correspond to different generations, to different reigns, and a century may well have intervened between the oldest and youngest of these sculptures. The first attempts were the least happy; then were carved those pieces which excite our astonishment by their excessive rudeness; but improvement soon followed. Could the stelæ be set out in nearly a perfect state, and in their original order, the advance of the stone-carver would be manifest to all; we should then see how steady was his progress from the opening to the final closing of the royal cemetery. The most perfect example of the series would be the first stela we have described, that which contains the best drawn and the largest number of figures.

The theme, throughout the series, is ever the same, and no change is rung from first to last; we even detect it in those specimens where the artist vainly strove to carry out his thought on stone. The subject is the glorification of the king; who, from his elevated chariot, commands the rank and file in the affray; a king whose swift horses, like those of Achylles in the

Iliad, enable him to defy all comers; a king, in fine, whose sword and spear always secure victory to the host he leads. Had not the king inured his body by hardships, and even exposed himself to danger in the intervals of peace by constant exercise in the pursuit of wild beasts, he would never have acquired the indomitable courage and daring which made of him a ruler of men. That he was a mighty tamer of monsters is proved by the lion and the antelope which fill the lower part of the first stela. Apparently there is no connection between this group and the one above, where the king and the enemy he has overthrown are depicted; the link existed none the less for the artist and the spectator, for whom his work was intended, in the idea always present to every mind of the boundless superiority and prowess of the king. The enamelled Mycenæ daggers and numbers of engraved stones show us the monarch spearing lions, whose approach caused every other animal to turn tail and flee. The mere sight of a running lion in pursuit of his prey at no great distance from the prince, would instantly call up to the mind a royal chase which the painter and goldsmith were wont to represent, whether on the frescoed walls of palaces, the blades of show weapons, or around golden goblets. sculptor was debarred by want of space, and mayhap also by imperfect technique, from picturing royal chases side by side with a subject obviously marked out for him by tradition and long usage. This is another point which testifies to the superiority of composition in the stela under notice.

If the scenes of the chase and of battle carved on these stelæ were reduced to a species of abbreviated formula, recalling the event rather than representing it, the stricture does not apply to contemporary metal-work, where far greater freedom and technical knowledge are exhibited than can be vouchsafed to sculpture. The reader will judge of the truth of this assertion by glancing at the annexed sketch from a drawing by Tsoundas, made upon a fragmentary silver vase (Fig. 358). The honour of the discovery is divided between Schliemann—who brought it out with other objects from the grave—and A. Koumanoudis, keeper of the museum of the Archæological Society, who first pointed out the unique interest attaching to the piece. The fragment at the time of its exhumation was covered with a thick layer of

¹ TSOUNDAS, 'Εφημερίς.

oxide; this, having been carefully and patiently removed, revealed a decoration which perhaps is one of the most interesting ever offered to the curiosity of archæologists. The sole existing scrap of this huge goblet is figured below. What we divine of the subject, which represents a battle fought before the walls of a city, makes us regret the loss of the rest. A very small number of the besiegers is all that remains of the folk engaged in the conflict. A city wall, exhibiting regular courses, like the

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Fig. 358.- Fragment of silver vase.

most carefully-built portions of the Mycenian rampart, appears on the right; above are structures with apparently no joints, hence the presumption that the masonry consisted of small quarry-stone or crude brick, overlaid with clay or plaster. At first sight one might be tempted to identify the substructures with strengthening towers, did we not know that the military architecture of that period was unacquainted with that mode of fortification, e.g. structures with a wide, vertical salience beyond the curtain. With M. Tsoundas, I should be inclined to recog-

nize in them town buildings, which the artist wished to show above the fortified works. They appear superimposed one above the other—according to the simple notions of perspective of that early period, to which reference has frequently been made—but we must conceive them as standing side by side on the slope, each with three windows. The entrance to these abodes is indicated on the right by serried parallel lines, answering to the boards of the door.

On the rampart are five women watching the battle which is being waged; the presence of a sixth is clumsily implied by an arm outstretched above the heads of her companions. Their dress consists of a tunic with sleeves that reach the elbow, and a turban-like head-gear. The attitudes are exceedingly varied. All are in despair: one is tearing her hair, others raise their hands to heaven, as if to take the gods to witness and implore their intervention; we seem almost to hear their cries and vociferations, as they encourage their friends and heap contumely on the foe. The besieged stand on lower ground, outside the enclosure wall; they fight with bows and slings, and kneel to take a sure aim. The slingers are figured just as they whirl the sling about their head preparatory to throwing; they all fight in a state of complete nudity. The three men on the right are dressed; two wear a short stiff cloak, perhaps skins, which covers the body and is passed under the left arm, leaving it exposed.1 Apparently they are non-combatants interested in the issue of the battle. They bring to mind the Trojan elders who are seated with Helen on the Scæan Gates and are looking on at the fight. The upper part of another clothed figure is seen below; was that a cuirass he had on? It is difficult to say. The helmet covering the head was fastened by a strap under the chin, and recalls those of the two ivories from Spata and Menidi respectively (Fig. 359). This personage was also a slinger in the act of stretching the cord. Had not the piece been broken off here, we should find at this point other soldiers better provided with defensive arms than those of the first group. Hence the force that defended the place was divided into several corps, whose equipment served to differentiate them. Before Troy, in like manner, were the young men from Ilium, led by the sons

¹ This is the $\chi \lambda \alpha i r \alpha$ of the classic period. It is worn to this day by the Greek peasantry; it consists of a thick woollen stuff made of goats' hair.

of Priam against the Greeks, then came the auxiliaries whom Priam had called to his aid, auxiliaries who were differently armed, and who fought with different tactics than the Trojans.

The oblique line which represents the ground below the ramparts and the houses is meant to indicate that the battle is being fought on the steep slopes overhung by the citadel. Nor is this all; the artist, like he of Assyria, took pains to define the scene of action by the addition of certain picturesque details; such would be the three or four trees rising at the side of the bowl, suggestive perhaps of a natural growth of olives. It may well be that the artist in this scene wished to call to remembrance some fearful assault made against Mycenæ, which had been

Fig. 359.-Ivory bust. Height, o m., 074; thickness, o m., 09.

successfully repelled by one of her kings, the prince perhaps whose grave contained the goblet; the acropolis which occupies the middle of the picture would naturally be that of Mycenæ. The configuration of the ground, the appearance and distribution of the buildings, seem to favour the hypothesis. The Mycenian goldsmith, using all the means of expression at his command, showed us a portion of the unit which has been bodied forth by us under two different aspects (Pls. IX., X.). M. Chipiez, then, was forestalled by the anonymous artist, in the days of the Perseidæ, that is to say more than 3000 years ago. The latter was a less accomplished draughtsman; but he had the advantage of personal and intimate acquaintance with the model he wished to copy. This it is which makes us regret that we possess but a small portion of the picture which he gave of his native town and

of the buildings it contained. But we have conformed with the scanty indications furnished by the fragment in question. In it, as in our restoration, the houses are provided with flat roofs, rectangular doors and windows. To this and similar points of agreement there is apparently an exception, in that our circular wall is crowned with battlements; but the difference is only skin deep. In the wall which we have raised from its ruins, the stone is only carried slightly above the platform occupied by the defenders; the line of the wall coping is somewhat irregular, but a little earth would soon bring it to a level surface. On this platform thus constituted we have placed a crenelated parapet of crude brick, faced here and there by quarry-stones. standing on the wall, the parapet is but a make-shift, a provisionary and separate structure, set up against an impending war, but which will be left to itself in time of peace. Hence it may well happen that a sudden surprise will find the walls destitute of breastworks and crenelations. In placing here these crude brick defences, M. Chipiez has but used a right which every architect who undertakes a restoration possesses, namely, to show a building as complete as it should be in time of need, and of presenting it in the best possible conditions, so that it should not fail of its purpose, or of a pleasing outward appearance.

The wall strictly so called is made of great blocks, and as free from crenelations as in the picture which the Mycenian artist has drawn. In regard to the earthwork, I think I can see them on the wall coping. How, except by the presence of a parapet, can we account for the lower part of the woman being invisible? From a continuous to a crenelated parapet, which would afford better defence and accommodation for the archers, there is but a step, and why should we deem the art of fortification of that period incapable of having made the advance during the interval which parts the Mycenæ of the first period figured by the gold-smith who executed the goblet, from the later Mycenæ which we have essayed to re-construct?

The interest which centres round this antiquity is due to the theme treated by the artist even more than the figuration of walls and domestic abodes. The subject, a battle fought between hostile forces under the walls of a beleaguered city, has been met before, whether among the nations of Anterior Asia, or in

the Egyptian and Assyrian bas-reliefs, or on Phœnician bowls; but until the other day we knew not that it also belonged to the repertory of Mycenian art. Of course as we read the siege descriptions which, said the Epic poets, were painted on the shields of Hector and of Achylles, we suspected that they had been taken from real works, and that certain features had been borrowed to colour and depict the various scenes grouped in the field of the defensive arm which the hand had decorated. But in our ignorance of Mycenian art and of its manifold resources. we had exclusively looked towards Phænicia for models which had stimulated the imagination of Homer and Hesiod; yet there undoubtedly was a grain of truth in the view which made us accept as Phœnician the oldest repoussé work found on Hellenic soil; and Greek poets may well have been indebted to the Semites for the knowledge of those concentric zones which divide the fields, and are the chief characteristics of all their compositions; be it on those gilt, bronze, or silver bowls which the Sidonian workshops sowed broadcast all over the Mediterranean; the choice of subject, however, and the spirit with which they are treated, the broad sense of life and concrete truth instilled in the picture of our fragment, would be vainly sought in the trade products of Syria. Hence the inference becomes irresistible that the descriptions of the poets were drawn from works analogous to our vase which they had under their eyes; for it would be absurd to think that this curious specimen was unique of its kind. The siege figured on the Shield of Heracles coincides at every turn with the picture under consideration, or the passage cited below: it furnishes another instance of the influence exercised on Epic poetry by native artistic work, the finest instances of which led back to the Mycenian period.

"The warriors fought in full armour; some to preserve their native city and their near relations from destruction, others because they were carried away by the lust of carnage. Many had fallen; a greater number still continued the conflict; the air was rent by the shrieks and piercing cries of the women standing on well-constructed brazen towers, who seemed to tear their faces; so cunningly had divine Hephæstos fashioned them that one almost fancied life was pulsating through them. As to the old men, stricken with age, they were gathered together without the gates, their hands were raised to heaven, and their

hearts filled with cruel apprehensions for the fate of their sons; these carried on the strife unceasingly." 1

Here too, shrieking and gesticulating women stand on the wall, whilst old men without the ramparts watch the affray, but take no share in it. One is almost tempted to ask whether the poet did not describe de visu the composition under consideration. If, aware of the many centuries during which the antiquity has lain in sepulchral gloom, we are obliged to dismiss the conjecture, we must yet accept the fact that the earliest artists had a great liking for the subject, and that they repeated it often enough to have caused it to pass in the stock-in-trade of the workshops. The imagination grew familiar with this and similar representations; it became accustomed to see it in the pictures offered by the sculptor and the painter; it would have felt cheated and robbed had it been absent from descriptions wherein poetry challenged the plastic arts.

Epic poets picture with no less complacency scenes of the chase, the heroes' contests with wild beasts, and above all the murderous exploits of the king of the forest, his ravages among the hapless flocks and the efforts of their guardians to repel their attacks. Works of the Mycenian epoch may not unlikely have furnished the subjects for their pictures, in the same way as they supplied the theme for the finest intaglios; and above all for the blades of a certain class of daggers found in the fourth and fifth tomb of the Mycenian acropolis. The forms, inserted in hollows previously sunk for the purpose, are slightly raised on the surface, and have all the appearance of a low-relief (Pl. XIX. 6). Although the salience is less perceptible in the other daggers, the style and mode of execution of all these pieces are sufficiently alike to permit us to class them together. When the silversmith models the living form, the lesser or greater degree of salience he gives to his figures matters not; in either case he does sculptors' work. The ornaments seen on these daggers, like the scene representing a beleaguered city, were detected by M. Koumanoudis, whilst cleaning the different objects which Schliemann had deposited in the building of the Archæological Society. As the thick coating of oxide was removed from the daggers, it revealed inlaid work which bears witness to practical knowledge of no mean order. M. Koumanoudis

¹ HESIOD, Shield of Heracles.

may be said to have made discoveries in the strict sense of the word, if not in the depths of the soil, in the confused mass of every kind which Schliemann, with characteristic impetuosity, had hastened all too soon to publish without having them first carefully examined.¹

The material of the daggers is bronze. As a rule, the show pieces are decorated by laminæ of a more precious metal or various alloys, inserted in the blade, one for each side. The decorative scheme is not uniform; the simplest is that of three bronze blades, measuring from forty to eighty centimetres in length (Nos. 4-6, Koumanoudis). Running animals are figured on both faces; we see horses on one specimen (Fig. 360), and griffins on two others (Fig. 361). Daggers composed of three pieces, i.e. the blade strictly so called, and plates applied to each face, average twenty to twenty-five centimetres in length. This more delicate process was only employed for the shorter weapons, but it slightly differed from one piece to another. The simplest specimen, solely ornamented with spirals and rosettes, and engraved in gold-leaf, appears in Pl. XVII. 2.2 Swords

¹ M. Koumanoudis announced the result of his operation in a note to the 'A $\theta \eta' rator$, 1880. This was followed by a description of eight of the daggers, accompanied by a plate containing the image of five blades. There still remained one of the weapons to be cleaned. When the difficult job was accomplished, it was published, with a much better plate than that of the 'Aθήνωον, in the Athenische Mittheilungen by Ulrich Köhler. M. Foucard, then Director of the French School at Athens, was not slow in grasping the immense value of the daggers, but not being satisfied with the colourless images that had appeared in the publications referred to above, and aware of the help which colour-far better than the most detailed verbal descriptions-would furnish to correctly understand the character and processes employed in the execution of the blades in question, he commissioned M. Blavette, a student architect at the French Academy in Rome, then on a mission at Athens, to copy them, which he did with five water-colour drawings that are exact fac-similes of the originals. These drawings were then engraved on stone by M. Dambourgez, under M. Blavette's supervision. The actual size of these weapons will be indicated with each successive figure, accompanied by a section to indicate the thickness of the blade, and the salience of the nails which served to fix the hilt. M. Blavette's plates were published in the Bulletin de correspondance hellénique, for which I wrote an article. I have scarcely anything to add to what I then said, but have availed myself of what has been published on the subject since then by MM. Schuchardt, Tsoundas, and H. Brunn. M. Foucard allowed me to keep the blocks, in view of the History of Art, and we are indebted to his kindness for being able to offer to our readers representations of works than which none are so difficult to reproduce as these. The editor and the authors of the present volume beg that he will accept their sincere thanks.

² Length, 235 centimetres.

having bronze plates inserted in the blade were by no means all alike. Thus, the figures beheld on one of these daggers were first modelled on the bronze plate (Pl. XIX. 6), and afterwards covered with thin gold-leaf. The manes of the animals are rendered by a somewhat redder gold than the remainder

Fig. 360. -Fragment of blade dagger. Actual size.

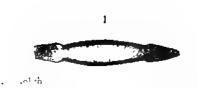
of the body, and the image is always strongly relieved against the background. Minor details were indicated, now by delicate lines traced with the point, now—for the broken ground where the animals are running—with gold-leaf, or an alloy of gold and silver which the ancients called *electron*. The lions are the chief elements of the scene; the rocks are but an accessory.

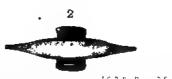


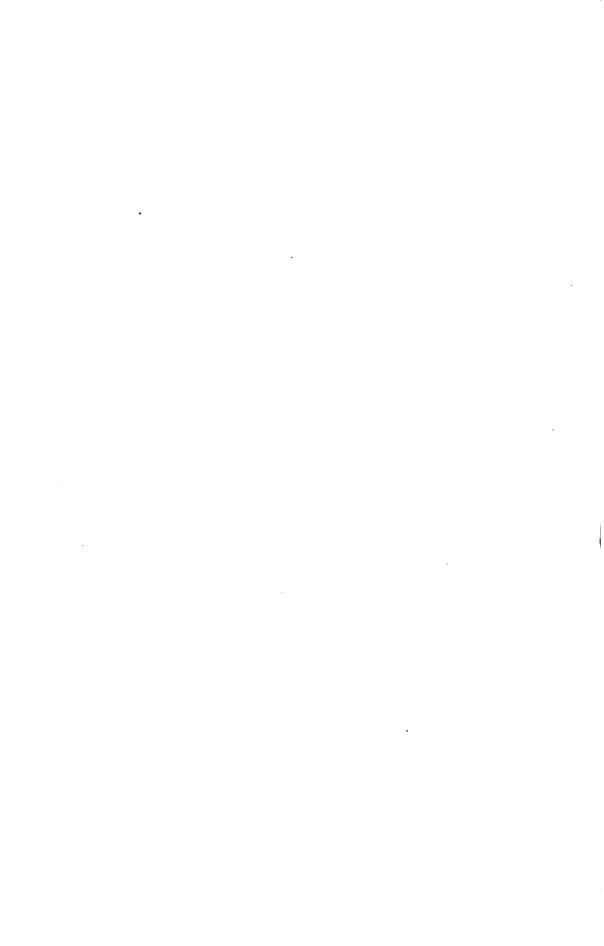
Fig. 361, -- Fragment of blade dagger. Actual size.

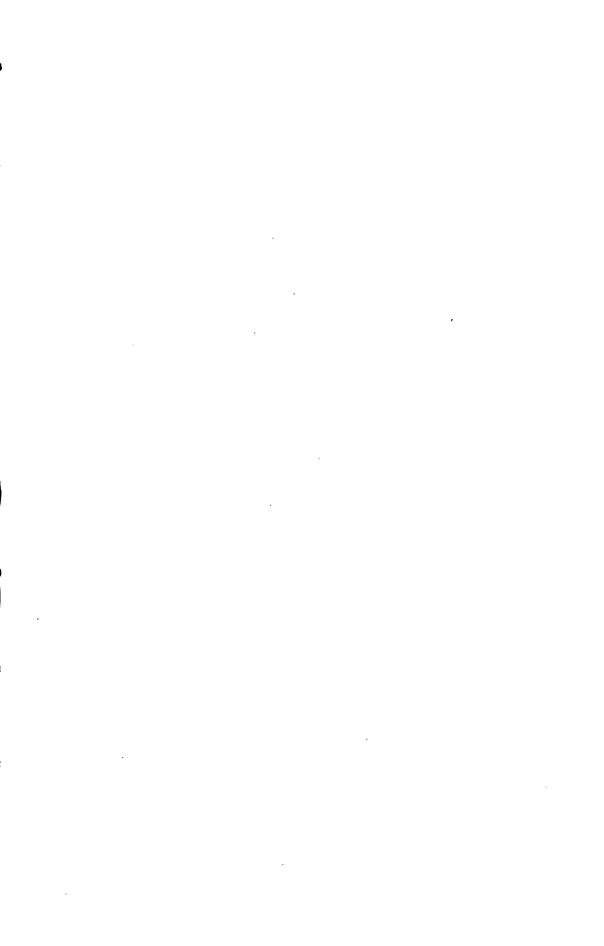
Then, too, we have daggers where the ornament is laid on flat, or in almost imperceptible relief, on the bronze blade itself, previously cut or hollowed into small cells for the reception of the gold or electrum fillings, which vary from the deepest red to silvery grey. Details, such as the plumes of a bird's wing,

¹ No. 2 of Koumanoudis. Length, twenty centimetres.









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the folds of drapery, spots of animals' skins, and the like, are traced with the point.

The dagger figured in Pl. XVII.¹ is a typical specimen of this kind of work. Panthers, hunting wild ducks along a winding stream peopled with fish, appear on both sides. The water is rendered by a streak of pale gold, against which are trenchantly relieved the dark slender stalks of flowering plants. The figures are outlined in a very arbitrary fashion, by two shades of gold; thus the neck of one of the ducks is picked out with dark gold-leaf, but the wings are pale yellow; whilst the entire body of another is grey, and two golden specks mark its open bill. This holds good with the panthers. The body is overlaid with electron; face, paws, and ears, however, are tipped with pure shining gold, and the tail is indicated by a narrow strip of the same precious metal, which stands out from the background. The fish are painted in black, on the lighter tone of the water.

The aquatic plants seen here have been identified, but we think erroneously, with the papyrus. The vegetable forms which bend over the brook are much more like a lotus than the straight papyrus of the Egyptian monuments; blossom and bud come nearer to those of the water-lily, than the terminal tuft of leaves of the Egyptian plant.

Pl. XVIII reproduces the two sides of perhaps the most remarkable daggers of the whole series. The decoration, though very like from one face to the other, is not identical. One side exhibits a great lion-hunt (Pl. XVIII. 3),2 composed of five men and three lions. Of these, one alone has stood his ground, the other two have turned tail and fled. On the other side of the blade (fig. 4), we see a lion and four gazelles; the lion has seized the hindmost, but the others are scampering away. The peculiar drawers worn by these men are known to us from the bronze statuettes (Figs. 351-354). Four of them are armed with long spears, which they grasp with both hands. Their shields are of two kinds: round, huge, and curved in at the

¹ Length, seventeen centimetres. Our plate shows but one face of the blades; the figures on the other, although not copied on those of the first, are precisely similar, and the different tints are indicated in the same manner. A drawing of this face will be found in *Mittheilungen*, 1882, and in Schuchardt's book.

² Length, 235 centimetres.

side, or small and rectangular. One of the men lies on his back, entangled between the legs of the lion. The fifth is an archer, without a shield; the knee is bent to draw the bow. The ground, indicated by an almost straight gold strip, is very distinct in fig. 4.

A last blade is less interesting in itself than from the fact of its having preserved the gold plate which once covered its hilt (Pl. XIX. 5).1 About one-third of the heel end of the blade still exists. The decoration, though very similar, is on simpler lines than that of the two preceding daggers; it consists of separate blossoms, each inlaid with stamens of brighter yellow than the corolla. The same flowers, but without stamens, resembling lilies or rather irises, re-appear on a gold plate in repoussé, which covered a bone or wood hilt, now disappeared. There, where the covering widens to form the cross-guard, will be noticed two holes for golden nails, which served to fix the Elsewhere the nails are in place, but nothing remains of the grip. Here it is the other way about. But armed with these two indications, there would be no difficulty in restoring the weapon; all that is required is to provide the gold plate with a hard core, drive into it the tang of the blade, and secure the hilt at the sides with three or four nails. The part played by these large-headed nails is at once useful and decorative; we now understand, as we had never done before, the oft-recurring epithets ἀργυρόηλος, γρυσόηλος, "silver and goldheaded," which Homer uses in describing the armour of the heroes.

If we have placed this last dagger, adorned by simple flowers, with those literally covered with human and animal figures, it was for the sake of keeping together objects exhibiting the same technique, and which must practically be coeval with one another. The methods found here were also applied elsewhere; so that we can show by the most remarkable example of all, that of the Shield of Achylles, how certain Homeric descriptions have been made clear by recent discoveries, the real meaning of which had until then been a mystery to the most sagacious and penetrating commentators.

We have said where, under what circumstances, and to whom redounds the honour of having found the pair of golden goblets,

¹ Length, eighteen centimetres.

11 ART

XIX

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nineut chercer Marie Bruss

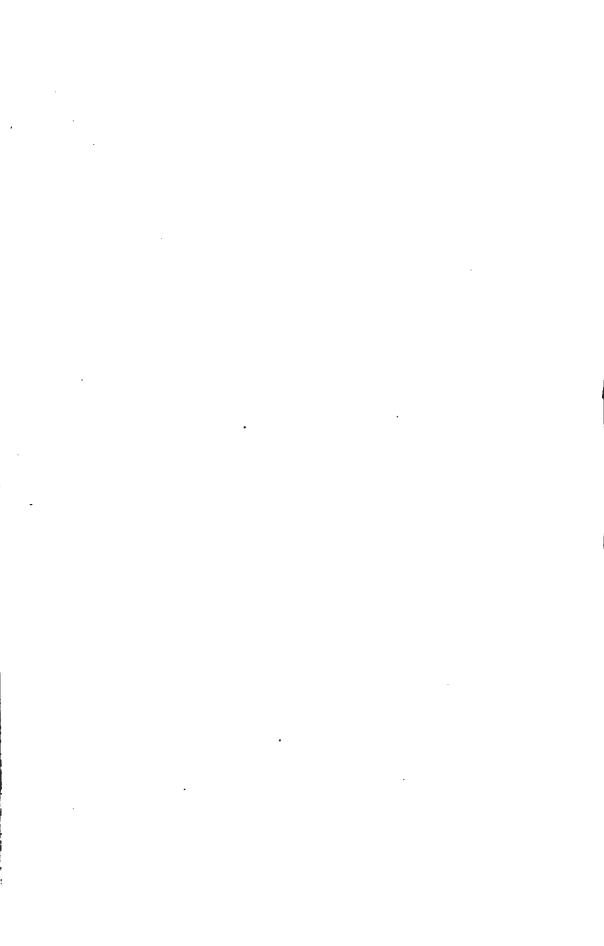


Fig. 362.—Gold vase. Vaphio.

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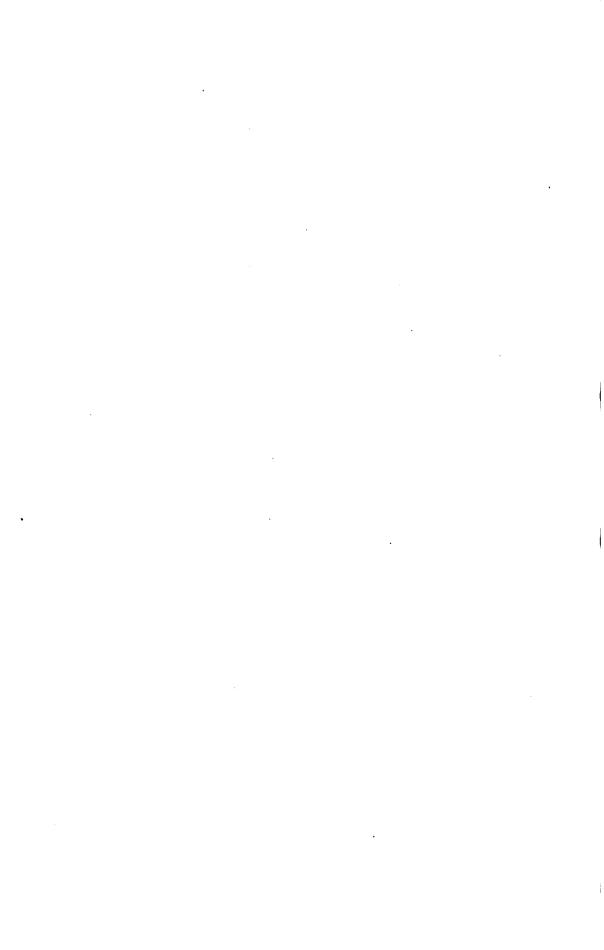
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whose discovery marks an epoch in archæology. Their shape and general appearance are well seen in Pl. XV., where they are shown exactly as they looked when they reached Athens in 1888. Their yellow hue is broken by dark patches, resulting from their long burial under ground; the relief, whose salience is so strongly marked as to break and destroy the contour of the vase, is frankly indicated. The entire figuration is spread out on two parallel bands in Figs. 362, 363.

The shape and dimensions of the cups are precisely similar, and but for the ornament we should scarcely tell them apart. The one to the left (Pl. XV.) is eighty-three centimetres, and its diameter at the upper rim is 104 centimetres; the diameter and aperture of the second goblet are equal to those of the first, save that the height is less by three millimetres. The difference between their respective weights is so slight—four centimetres—as to be imperceptible to the eye. Above and below the figures of the first cup (Pl. XV., to the left) runs a band, adorned with fillets, which plays the part of plinth below and of cornice above. This

1 M. Tsoundas was the first to publish the Vaphio vases (Ερευναι εν τή Λακωνική κα ὁ τάφος τοῦ Βαφείου, in Ἐφημερίς, 1889). His memoir is accompanied by a drawing made under his direction by M. Gilliéron, with intelligent and scrupulous fidelity. The only defect of the plate is its having aimed at reproducing both the general contour of the vase and the outline of the figures adorning it, with all their inner detail as well. The lustrous tones of the yellow are somewhat conventional, and mar rather than help the effect, so that the full outline of the image can only be seen at a certain angle. This led M. Foucard to try another mode of reproduction. M. Defrasse, a student of the French School at Rome, happening to be in Greece at that time, was requested by him to draw the two vases. These drawings were published in the Bulletin de correspondance hellenique, 1891. Pls. XI. and XII. of the Bulletin appear in our Pl. XV. As regards Pls. XIII. and XIV. of the Bulletin, they reproduce the whole ornamentation of the goblets after the system used in the Greek plate. But here the form, being left untinted, detaches itself better on the background. Our Figs. 362 and 363 are reductions of M. Defrasse's drawings. At M. Foucard's desire, I wrote some remarks to accompany the publication of these capital sketches (Les Vases d'or de Vafio, 1891). My task was facilitated in that I was able to use M. Tsoundas' learned and well-pondered dissertation on the goblets in question. But now that the vases have been for more than three years in the hands of archæologists, it seemed best to sum up the discussions to which they have given rise, all the more that quite recently fresh monuments have been discovered offering useful points for comparison. Since then, discoveries and discussions have grown apace. The principal papers and memoirs wherein, as far as we know, the Vaphio vases have been considered, were indicated in a note to our article.

species of frame is wanting in the other vase. Handles and technique are identical in both. The design is hammered up; but the hollows inside are not visible, because each cup is formed of two plates set one upon the other. The inner one, which is quite smooth, conceals the wrong side of the repoussé, and does duty as lining. It was kept somewhat larger, and folded back on the outer plate to form the rim.

Cups which, like these, are made of a double piece absolutely without seams, are widely different from vases composed of several pieces, and applied to the background either by soldering or riveting. The artisan knew how to solder gold upon gold; for thus, apparently, was fixed the vertical stem which serves to connect the two horizontal bands of the handle.1 But he used the hammer far too airily to dream of building up his vase with applied pieces that were apt to separate. Both plates, the inner as well as the external one, were beaten down from a thick circular sheet of gold. The artificer began at the centre, and hollowed it out with a series of gentle blows, driving the metal particles towards the periphery; this he would call "expanding" the metal. The ingot to be beaten up is placed into a mandrel or pan, which must be both massive and of a hard substance. The resistance it opposes to the pressure exercised on the molecules by repeated blows with the hammer helps the operation, which will progress easily and steadily enough when mere rough tinkering is in question; but the operation is much more difficult when the form has to be beaten up from a thin plate. This is so readily influenced by the blows applied to it that, unless great caution is used, it is difficult to bring it even approximately to a level without cracking it.

The vase, once made, had to be decorated; and the silversmith has given proof of no less skill in this second part of his work. In saying this we do not advert to the composition of the scene or the modelling of the figures. In the master-smith who chiselled these vases we study the craftsman not yet the artist. Let us suppose that the artificer had to work out these figures in one of those bands or plates found at Mycenæ; all he would have had to do was to place the band or plaque upon a soft substance, sand or ashes, and the figures would have sprung up as by magic under his chisel. But the same methods could

I TSOUNDAS, Έρευναι.

Fig. 363.—Gold vase. Vaphio.

• 1 not be applied except with great difficulty to a circular vase, of so feeble a diameter as to scarcely allow the hand to get through the narrow aperture. The tool lacked space and re-To have succeeded in such conditions as these in producing so true a shape is nothing short of marvellous. Again, the inner plate or lining seen here implies that exceptional care was bestowed on these goblets. If the goldsmith laid upon himself this additional burden, for which we should vainly seek another example among the similar objects yielded by the Mycenian graves, it was not merely to make the walls of the vases stronger, but also to endow them with greater refinement and a more pleasing appearance. The rugged surface and its unsightly hollows, corresponding with the reliefs of the design, were concealed by the fine, smooth gold-leaf, which enhanced the rich effect. To the foregoing remarks, relating to the practical knowledge which is displayed here, we have nothing more to add, save that the work begun with the hammer and chaser was gone over and finished with the burin. parts requiring special markings, such as the hair, coiled ropes, leaves, stems of palm trees, etc., were worked with a fine point.

We must now turn, none too soon, to the study of the subject, or rather subjects-for the theme varies from one vase to another -which are represented on the Vaphio goblets. We will begin with the cup which bears the scene enclosed by a double band (Fig. 362). The central bull gives us the clue to the whole picture. He has been scared by the tally-ho of the beaters, and has rushed into the toils of a great hunting-net, tied to a couple of trees right and left. Thrown on his haunches, he roars in mad fury, and strains his head to the skies as he vainly struggles to free himself. Warned just in time by his brother's misadventure, a second bull has cleared the net with a formidable leap, without touching ground; he turns to the right and effects his escape, no one pursuing. Two men have dashed forward to arrest a bull who is rushing furiously to the left, but both have come to grief. One has been caught and tossed in mid-air, whence he falls on the brute's back; the other has apparently not been tossed, but has been transfixed and hurled

¹ The cups from the Mycenæ graves, having no second plate, show the hollows of the raised pattern, as will be seen by reference to Schliemann's book.

headlong to the earth, where the beast worries him in vainly trying to shake him off. Tall trees enframe the composition, one on each side; but to what species they belong it is difficult to say.

The figures on the other vase which correspond to the netted bull, are two bulls standing close to each other; one faces the spectator, but the head of the other is turned towards his companion, as if about to converse with him (Fig. 363). This group is separated by a shady tree from a third bull, slowly moving along, his head lowered to the ground. On the left is another bull, whom a man leads by a string fastened to his hind leg. We feel that the animal is not likely to give his captor much more trouble. True, he pulls and obeys unwillingly enough, but the lasso has done its work, and knocked all go out of him. He spends the little energy which remains to him in filling the air with heart-rending lowing. Behind him is a tree, like that on the other side of the handle.

We have no difficulty in grasping the idea which the artist wished to express in these two pictures. It is self-evident that the first is intended for a bull-hunt, and that in the second we have the animal led away captive. The two scenes are enacted on the same spot, a narrow gorge and grazing ground on the hill-side, and the same actors appear in both; the mighty bull who must be tamed and his strength utilized on the one hand, and on the other the primitive man who risks his life in this hazardous pursuit, and will presently reduce to nought the beast's murderous attacks which have so long terrified him, by tying ropes round his horns and putting a yoke on his neck. There can be no doubt that the scenes were intended to balance each other. The artist seems to have delighted in strongly-contrasted themes taken from the same sphere; here the stormy bull-hunting, there the issue of the drama.

The general composition and blocking out of the two scenes were conceived by one and the same artist; yet were these even less intimately allied than they are to each other in unity of subject, we should still have no hesitation in proclaiming their unity of origin. Both exhibit the same processes, the same work and style, the same way of indicating the costume and accessories. To say that the vases have sprung from the same school does

not approximate the truth; both come from the same shop. deduce therefrom that they were fashioned by the same hand would be somewhat hazardous; and on this point we may hesitate to be assertive. We have already indicated a point of difference between the twin compositions; namely, that one only is enframed Had we here the work of one pair of hands only. it by a band. seems natural to infer that the same arrangement would have The variant is better accounted for obtained in both vases. on the basis of a second craftsman, who, although required to assist in carrying out a common work, yet preserved his own individuality. Nor is this all: the pieces are also distinguished by difference of make. Thus, the incised lines on the vase with the hunting-scene have not had their edges beaten down, they have been left in the rough; whereas, on the other goblet, these slight asperities have been smoothed and rounded off, as if with the deliberate intention of effacing the traces made by the tool.1

Again, the two artisans used their tool somewhat differently in beating up the figures. The portions in relief on the first cup are connected by a curve with the background; but on the second they are allied thereto by a straight edge which is perpendicular There, the outline of the living forms is sharper and to the field. harder; it recalls the methods of the goldsmith rather than those of the sculptor. In the first instance, the manipulation is less finished, more careless, and the details have not been attended to, but for that very reason it is instinct with greater breadth and movement; the work, whilst preserving a more sketchy character. is chalked off with a fire and sureness of hand which testify to the knowledge and spirit of the master. This is apparent in many ways. Thus, the limbs of the bulls chased by the men are more firmly knit together than those of the corresponding cattle taken out to grass; they are more intimately united to the body, whose movement they espouse and continue. On the second vase, the points of junction of the hind quarters are weak and conventional; the legs seem to hang loose in a limp, helpless kind of way from the body, as if they had been tacked on and did not belong to it. We cannot be surprised at these bulls being larger and fleshier. The difference in the outward appearance arises from their mode of existence; a domestic animal puts on more flesh than one in

¹ TSOUNDAS, 'Εφημερίς.

a wild state. This, however, may be the result of clumsiness of hand rather than a deliberate intention based upon a just observation of nature. The heads leave much to be desired: that of the left bull is deficient in mass; but for the body to which it is joined, we should think it a ram's rather than a bull's head; whilst that of the fellow next to him is utterly void of expression. points and shades we have pointed out cannot be all detected either in M. Gilliéron's or Defrasse's drawing; and it is doubtful whether they can ever be rendered by any reproduction, however carefully and intelligently made. To obtain as true an image as possible of these vases, it were perhaps necessary to employ a separate process for each. The first cup should be drawn with a soft pencil, so as to get a somewhat broad outline, in such a way as to show the transition which is effected between the plain surface of the background and the relief of the figures.

The passage from the unwrought to the wrought surface is produced, on the second cup, by a resault at acute angles, and the inner markings of the figures are more deeply incised. Here a hard pencil cut to a point should be employed to render the peculiar arrangement of the planes and precision of line. With this process, however, differences might easily become forced and exaggerated; although the amateur who stands a few minutes in front of the glass-case in which the vases are deposited is not likely to single them out, at any rate at first sight. order to differentiate between them, one must needs hold the pieces in one's hand and look long and narrowly at them, as I did in May 1890.1 The impression gained from the drawing was confirmed by minute study of the originals in the Museum at Athens. From the outset my preference was given to the first vase. The greater brilliancy of invention and richer variety of incident attracted me; I fell under the spell of the unwonted fire and movement portrayed with so remarkable a boldness in the hunting-scene. The peaceful attitudes of the pasturing

¹ Before describing them, I should much have liked to see again the vases in question. My notes, taken three years before, did not satisfy me at all points. At my request, M. Ridder, one of my young friends at the French School at Athens, examined the vases, and was good enough to forward the result of his observations. They testify to his fine taste, and I have not hesitated to make a liberal use of them.

animals pleased me also, for the poses are expressive and well chosen; the quiescence of the lines are cleverly opposed to the more agitated groups of the first goblet; they should therefore satisfy the mind in an equal degree; yet, unconsciously as it were, the eye would steal back to my first love, where the interest was livelier. Of course the stirring theme had something to do in exciting my curiosity to greater depths; but it was also because I divined, even through an imperfect copy, a freer and franker touch. Nevertheless, if there be glaring faults of drawing anywhere, they will be found rather in the first cup than the second. We do not allude to the quaint perspective or deformation of the human figures. These are blemishes common to both vases, and which we find in other productions of Mycenian The scene representing the contest between the man and the wild bull discloses errors of a peculiar nature, not to be accounted for by insufficiency of conventions which contemporary plastic art had adopted.

The pose of the bull entangled in the net is forced and unnatural; nothing short of a broken back could have twisted him round in such a way as to bring his forelegs in touch with his horns. Then, too, the legs of the left bull disappear we know not whither. True, that part of the body is supposed to be covered by the bull caught in the net; but the eye is perplexed by the incomplete outline. Finally, the treatment of the man transfixed by the beast's horns is somewhat confused. One of his arms is invisible; the head, instead of bending forward towards the earth where he is falling, is thrown back. This is because the sculptor has attempted a bolder flight than he could well manage: he undertook to represent sudden and violent movements, which are necessarily of short duration. To satisfactorily carry out so arduous an emprise required no less than the consummate knowledge of a specialist, a Landseer for example. The task allotted to the other sculptor was less difficult; the stationary or slow movements represented there are natural to the animal, and can be observed at leisure wherever there is a drove. The posture of the one man who has a part in this picture is simple in the extreme. The figures are all quiescent; they fall easily and without effort in their place.

Nevertheless, as if the artist had been spurred on by the difficulties he had laid upon himself—in despite of crudities and

imperfections—he comes off best in the hunting-scene, where the end aimed at has to a large extent been reached. The draughtsmanship is more compact than in the second picture: it implies a more observant and inquiring eye into scenes of every-day life, and discloses points marvellously true to nature. These will be felt by any one who has closely observed the habits of the beast who figures here as the hero of the drama. If he has ever seen a bull-fight, he will know that the animal's tail, which hangs down behind when at rest, is immediately raised when excited. Here, the bull who has stretched his body preparatory to clearing the obstacle, has not only raised his tail, but sent it forward in front as if to help the movement of the body; whilst fury has caused that of the bull who has overthrown the huntsman to stand erect and rigid in mid-air. The most vicious and murderous blows which can overtake a toreador are not those which the bull deals straight out at his foe, but those he dispenses with one horn only. In the first instance he may overthrow his adversary and inflict sharp pain; but the blow is hardly if ever fatal; the beast's horns have had no grip on the vital parts of the body. With regard to the netted bull, we stated why it is open to criticism; yet how instinct with life and passion that head is withal! We seem to hear the impotent and enraged lowing which issues from that wide-open mouth. If, as has been said, it might just be possible that the artist, having to treat the two subjects one after the other, felt his interest stirred to greater depths in the one case than in the other, this would assuredly appear in inequality of inspiration, relative feebleness, and lack of expression. But manipulation, acquired by long training and experience, becomes mere routine work, and is not likely to betray faltering inspiration; in spite, then, of inferiority of conception, the workmanship would be practically alike in the two pieces. Here, however, the two compositions are of equal merit; they finely balance each other, and both point to unity of arrangement and presentation; but difference of make is observable from one to the other. Hence, these facts would incline us to infer that the two scenes were imagined and sketched out by one artist only; he kept the hunting-scene for himself, as that which was most difficult and attractive; and he allotted the second vase to a pupil, who, though slavishly carrying out his conception, had neither the same feeling for, nor the same knowledge of,

the bull's anatomical construction, or the same sureness of hand as the master himself.

The works of the Mycenian plastic art, wherein are represented its favourite themes, be it the gods whom the people worshipped. or the chiefs to whom allegiance was paid, have already been passed in review. We next come to those instances which have neither the religious character of the idols, nor the historic or expressive value of scenes such as those which the sculptor modelled with varving skill on the stelæ of the royal cemetery, the blades of princely weapons, and the goblets used by tribal chiefs at their banquets. In this category are comprised the golden masks, in their twofold artistic and sepulchral character; that is to say, images which, like the bas-relief of the Lions Gate, have a symbolic and heraldic significance, along with the objects taken from the living world to adorn instruments, furniture, and jewellery. Although this art started with the unlovely shapes of which many specimens have passed before the reader, it ended in being quite able to cope with the human and animal form. and conscious of the resources which would accrue therefrom as a decorative element, often using it with happy results.

Golden Masks.

Of all the objects which Schliemann brought to light in 1876 at Mycenæ, none created so great a surprise among archæologists as the golden masks which he found in the third, fourth, and fifth graves of the acropolis. The reason of their being is not far to seek. They were designed to preserve the features and general outline of the dead, slowly but surely falling away behind their gold veil; their purpose, in fact, was to stay the law of nature. The masks show us a life-size human visage plastically modelled. The faces they covered are now reduced to dust, but at the time of their discovery bits of the skull still adhered to the gold plate, proving that the masks had been placed there

¹ Schliemann, Mycence; Schuchardt, Schliemann's Ausgrabungen.

at the time of the inhumation. The burial practice is not mentioned in the Epos; and no data could be adduced in favour of its existence among the nations of antiquity. This fact, coupled with the exhuming of the instances of an art which was not even suspected, fairly threw scholars off their balance. In their confusion they at first ascribed the shaft-graves to German or Slavish barbarous tribes. But when soon afterwards M. Otto Benndorf showed that inhumation had been practised from the earliest days down to the Roman period by most nations of the ancient world, the attribution in question had perforce to be abandoned, and it fell into well-merited contempt. Apart from Egypt, he went on to say, where every mummy has an artificial face, masks, whether gold or silver, bronze or terra-cotta, have been discovered in countries wide apart from each other, in Mesopotamia and Phœnicia, in Crimea and Italy, on the Danube, in Gaul and Great Britain.

From the nature of the objects found in some of the graves, it has been determined that men alone had masks. Women appear to have been lowered into the pits with uncovered faces, though decked out in diadems and other ornaments suitable to their sex. Two children, perhaps the sons of chieftains, had masks with holes for the eyes. But in their case they were no more than gold leaves, which not only covered their faces but their hands and feet as well; as the impress of finger and toe amply testifies. The gold plates out of which the five remaining masks were made were much too thick to have been moulded over the face of the dead. The image was obtained either by beating out the form on a wooden mould, or by the processes of repoussé work, which these artisans knew so well. The edges of the gold sheets were cut with the chisel. The difference of execution from one mask to another, even when discovered in the same grave, is quite amazing. This is so great that we are irresistibly led to the conclusion that they were wrought by separate hands; and that a long period intervenes between the rudest mask and those exhibiting a freer and surer handling. allowed, this view of the case would strengthen the hypothesis that the graves of this cemetery cover a period of perhaps one or two centuries, and that each of them was re-opened after a longer or shorter space of time. Perhaps the most primitive

¹ O. BENNDORF, Antike Gesichtshelme und Sepulchralmasken.

and uncouth mask of all is one of three discovered in the fourth grave (Fig. 364). Our drawing shows it exactly as it was when taken out of the ground, e.g. flattened out of all shape by the superincumbent earth and stones; but though the mask itself is now touched up and restored, it has lost none of its air of brute

- Fig. 364.—Gold mask. About three-eighths of actual size.

savagery. The eyes are like two very prominent round balls; and as they are surrounded by sharp edges, they give the impression of being wide open. The hand that modelled this plate was as yet unacquainted with the use of the point to complete the work of the hammer and chisel. It is therefore probable that the lines marking the closed lids were omitted through lack of skill.

¹ Schuchardt has figured it in its restored state.

The nose has been pressed out of shape, and it is difficult to judge what it looked like. The mouth is rendered by a curved indenture, which goes off at each corner into so long a line that the ends can no longer be part of the mouth. Each end is joined by another line coming from the corner of the nose, and as the space thus enclosed is somewhat raised, the simple artificer probably meant to indicate a moustache. The lower lip is very thin, and the chin bears no trace of a beard. The ears are misshapen,

Fig. 365.—Gold mask. About three-eighths of original size.

and placed a great deal too high. The two other masks from this grave are so much alike that one only of them has been figured here. It is also the best preserved (Fig. 365), and the hand that modelled them had resources at its command which are to seek with its predecessor. The eyelashes and the brows are rendered by incised strokes. If there are no traces of a moustache or beard, it is probably because the wearer of the mask was young. The features are regular: a long, straight nose, a small mouth with full lips. The eyes are very small and closed. The sculptor's inexperience betrays itself in the slanting line between

the eyelids, and the abnormal distance which intervenes between the ear and the external angle of the eye.

A very similar mask to this, though inferior from an artistic standpoint, was found in the fifth grave, which contained three corpses and two masks; save that here the nose is shorter and the

Fig. 366.—Gold mask. About half-size.

ears somewhat less objectionable.¹ The eyes are on a plane and set close together; the nose long and well shaped; the mouth of moderate size, with thin lips; the mastoid process is in its place, and the roundness of the chin frankly indicated, under the soft broad masses of the beard, which are rendered by hatchings; so

¹ This mask was also restored; it will be found much better reproduced in Schuchardt than in Schliemann's book.

too are the eyebrows and moustache, and one is somewhat surprised that the eyelashes should have been omitted.

The excavators have pointed out the marked differences observable between the several masks; they recognized that those who made them had not aimed at reproducing a conventional type consecrated by tradition, but that they represent the likeness of the deceased whose face they covered. Whilst the preparations for the funeral were proceeding, the body of the great man, preserved from decomposition by partial embalming, was laid out in state; meanwhile the artificer worked hard in order that the mask should bear a strong likeness to the defunct who was about to be covered with it. The task was not an easy one; but it gave him an opportunity for exercising himself in the rendering of the human face, where he had yet much to learn. The mask on Fig. 366 shows what steady work has done for him; its construction evinces considerable skill, and must have recalled the prince's physiognomy to his friends and kinsmen. We have here a portrait in the strict sense of the word. Schliemann says that in the fourth grave he alighted upon a mask bearing a lion's head.1 But in this he was mistaken; the plate never covered the face of a dead man. Close inspection has revealed the fact that the mask had been fixed to a smooth surface, likely enough a piece of wood, by means of the horizontal plates projecting from the lion's head. Hence the probability that it may have served as a device for those shields as are depicted on many an intaglio.

The Lions Gate.

The stimulus which prompted the Mycenian artist in his attempts to take likenesses of his sovereign was the respectful regard he felt for the royal countenance, and his desire to rescue it from oblivion. In the same manner, later on, the most monumental work of the Mycenian sculptor sprang from the pride of hereditary chiefs, and their desire to strike the imagination of men. In either instance the end the artist had in view was not

¹ SCHLIEMANN, Mycenæ.

² SCHUCHARDT, Schliemann's Ausgrabungen.

to create a work of art; yet in carrying out the behests of an imperious will, he gained greater facility in imparting to form the degree of precision and truth which it must have to translate thought.

He who runs may read the meaning of the bas-relief which adorns the main gate leading to the citadel. It is carved in a greyish limestone quarried in the neighbouring hills (Pl. XIV.). It is unnecessary to describe its shape, cut in a triangular slab surmounting the door lintel.1 The sculpture represents two lions rampant, heraldically opposed, and separated by a column. The hind-legs rest on the ground, and the fore-paws on a species of Their body is shown in profile, but their heads, now obliterated, faced the spectator, and may have been destroyed when the Argives stormed the fortress. The heads looked sideways; one conceives them in a threatening attitude, showing their double row of teeth through their wide-open mouth. The lion is recognized by all nations as the emblem of superior strength, before whom opposition would be vain. Here the two stand at the acropolis entrance, as faithful and invincible guardians, jealously watching its approaches. They play the same part as the winged-bulls and lions of the Assyrian bas-reliefs, or the golden and silver dogs before the palace of the Pheacian king.2 The symbolism is obvious; the presence in this situation of the powerful and redoubtable force was calculated to bring to mind the valour of the soldiers posted on the castle walls, the fame and gallantry of the captains who head them in the affray. The masters of the impregnable fortress flung there the group as a challenge to the foes of Mycenæ, past, present, and future.

Thus far all is plain sailing; but our difficulties begin the moment we venture upon the interpretation of certain details. The column has been held to mean, now a fire-altar, now Agyieus Apollo,³ who, in his capacity of road guardian, was sometimes

¹ See ante, Vol. I. p. 308, Figs. 99, 184, 192. The slab is three metres twenty centimetres broad at the base, two metres ninety centimetres high, and seventy centimetres thick. The best description which has appeared of this monument is by ADLER, Das Relief am Löwenthor zu Mykenæ.

² Odyssey.

³ In many places, but above all at Athens, he was worshipped as Agyieus, the god of streets and highways, whose rude symbol, a conical post with a pointed ending, stood by street-doors and in courtyards, to watch men's exit and entrance, to let in good and keep out evil, and was loaded by the inmates with gifts and honour, such as ribbons, wreaths of myrtle or bay, and the like.—Trans.

represented by a simple raised stone. Early explorers missed the meaning, and failed to grasp the true character of the monument, from a too hasty and superficial inspection. The capital is like all Mycenian capitals; above it are clearly indicated the members composing an entablature, analogous to that which we have placed in our restoration of the palace on the authority of other buildings of that period. We therein recognize the architrave, and below it the ends of the round joists which form the ceiling, along with the upper floor, which bears aloft the terraced roof. The column, then, is an abridged support of that of the palace crowning the rock of the acropolis, where it carries the loft. The two objects seen under the slab which serves as base to the column have been recognized as altars, because of the close resemblance they bear to that painted on a well-preserved stucco fragment from Mycenæ (tail-piece, end of

Fig. 367.—Gem.

Chap. VI.).² Then, too, the altars correspond to those that stood near to the hearth, on which the head of the family was wont to offer propitiatory sacrifices; and with the entablature, they help us to define the palace wherein the city was reflected and summed up.³

A number of engraved stones help us to understand how familiar was the symbol we are considering to the men of that age. A gem recently picked up in a Mycenæ grave reproduces, albeit with curious modifications, all the essentials of our group; it is obvious, therefore, that it was not copied from work of statuary proper. Here the shape of the altar supporting the pillar is precisely similar to that of the bas-relief (Fig. 367); but the shaft of the column, instead of being smooth, is furrowed with wavy flutes. The capital is that of the Mycenian

¹ See ante, Vol. I. p. 522, II. 131-132. ² 'Εφημερίς.

⁸ We are happy to be in agreement with Adler in this particular and H. Brunn (*Griechische Kunstgeschichte*).

⁴ TSOUNDAS, Munificat.

order, and above it appears the entablature. Remembering the small scale of the object, we cannot expect to find here the several members as clearly marked as they are in the Lions Gate; yet we think we can make out the heads of the cross-beams, and the cornice enframing the flat roof above. The attitude of the animals, whether about the altar or the Lions Gate, is identical; save that in the one instance we have lions, and griffins in the other. Comparison of the engraved stone with the bas-relief brings out the fact that the details, taken singly, are dissimilar; yet in a general way the two compositions are so alike as to lead to the conclusion that they are replicas of a subject hallowed by tradition. The same design, though in a modified form, reappears on other objects of the same nature, on two engraved stones, the one from Crete, and the other from Mycenæ (Pl. XVI. 11, 20). The column has been omitted, and on one of the intaglios a star has been put in its place; but the altar and the lions preserve their original posture. The bodies, like those of the griffins, are shown in profile, and the heads thrown back. The movement is somewhat forced, because it does not quite interpret the original intention of the artist. He started with the idea of having the animals' heads turned towards the spectator, as we conceive those of the lions over the gateway to have been; but his heart misgave him when he tried to solve the problem between a view in profile and one facing; he did not know how to place the heads in so narrow a space. The problem was solved in true arbitrary fashion in the second intaglio, where we find a single head, squarely facing us, somewhat above life-size, stuck on a double body. But the modelling is bold, and the protuberance of the muscular masses which furrow the forehead of great feline animals is rightly given. Despite trickery, the head bears so brave a look as to disarm criticism.

Glyptic art does not by any means keep the monopoly of the type to itself; we divine a replica of it on an ivory handle (Fig. 368). The ornament, which occurs towards the tail end of the handle, consists of a double row of spirals, whereon rests an altar shaped like those of the Lions Gate, except that here the surface is seamed with horizontal and parallel lines. Visible on the upper face of the altar are the paws of two animals face to face, separated by a slender column. In face of the worn

¹ Das Kuppelgrab bei Menidi.

state of the bas-relief, who shall decide whether they were lions or griffins?

The question has been raised if, considering the situation the

F10. 368.-Menidi, Knife-handle of ivory. Half-size.

group occupied, we should not identify it with the coat-of-arms of Mycenæ. The triangular slab has been compared with the escutcheon set up over the gates or the summits of flanking

towers in the cities of the West. The heraldic physiognomy of the lions, their pose and exact symmetry of movement, certainly recall those seen on the armorial bearings of patrician families. These analogies were pointed out by Curtius, who demonstrated that the usage of emblazonry, e.g. of a visible sign representing an individual or a nation, mounted back to hoary antiquity.1 Furthermore, that when these personal and distinctive signs were adopted by the Christian world, towards the time of the Crusades, the artists had turned to the East for many of their devices and artificial types. These had come into existence on the banks of the Nile, the Euphrates, and the Tigris, whence they had passed to Anterior Asia, Greece, and Italy, thanks to the weaver and embroiderer, the ceramist and jeweller, they had again become the fashion with the Byzantines and It would be doubtless interesting to follow up to Persians. regions lying at vast distances from one another, the manifold connections and transmissions relating to these several forms; but setting aside such delicate questions, we may be allowed to advance the following remark. Different sources have now supplied us with many replicas of a type which, for thousands of years, was known solely by the Mycenæ bas-relief; yet, though very like in many respects, not one of them is an exact copy of the original. Accordingly, it is no longer possible to view the Mycenæ lions in the light of individual property, the special emblem, the "totem" as it were, of the tribe settled around The design, no matter where it originally was the fortress. adopted as the embodiment of the idea referred to above, was doubtless already diffused from Crete to Peloponnesus, when the prince who enlarged the circuit-wall desired that the group should be carved in the calcareous rock to adorn the newly-built castle gate.

About the ramparts of many an ancient township are beheld very similar emblems. The hideous Gorgon's head was supposed to strike terror in the beholders. We learn from Pausanias that in his day a Medusa's mask was shown at Mycenæ—it probably stood over one of the gates—which, said tradition, had been carved, like the lions, by Lycian Cyclopes in the pay of Prætus.² Over the old gateways of the Pelasgic towns of

¹ E. Curtius, Ueber Wappengebrauch und Wappenstil in griechischen Alterthum.

² Pausanias.

Alatri and Ferentinum, in Italy, is still emblazoned a phallus, the symbol of life and strength. At Thasos we have an abridged human face, a nose and eyes, cut in the stone of the enclosure. The latter symbolized the guardians of the site. The simple fresh fancy of mankind in its infancy delighted in exhibitions of this nature.

The sculptor of the Mycenæ bas-relief did not, then, look beyond the repertory of contemporary art. His merit and individuality consist, perhaps, in having first ventured on proportions not far removed from reality. It is now our duty to appraise his handiwork, making due allowance for the mutilated state in which we find it. Painting, inasmuch as it was in the habits and taste of the Mycenian decorator, may have been called in to heighten the effect. The question has been asked whether the brush had not laid tones on the background and the relief alike, and even emphasized certain details of the animals:² but no trace of pigment exists on the stone in support of the above hypothesis. At any rate, the heads, which would have been so helpful in defining the character of the group, have disappeared. The fact that they were in high-relief precludes the notion of their having been carved in the thickness of the block itself, in that it is too thin by half. Moreover, such a line of conduct would have involved removing an enormous quantity of material from the portions of the relief which, like the animals. were in a receding plane, and thereby greatly increased the sum of the labour. The heads, therefore, were carved separately. and secured to the slabs by tenons; the holes into which these were inserted are quite distinct on the stone. Were these heads, as has been conjectured, of gilt bronze, or cut in one of those red or green rocks that form so large an item in the decorative scheme of the domed-graves? These are regarded, by universal consensus, as about contemporary with the Lions Gate, so that the presumption does not sin against probability. Or were they fashioned out of a block of limestone, like the remainder of the sculpture? Who shall say? Given the simplicity of the decorative system of this gateway, I incline towards the last hypothesis.

The group, although shockingly mutilated, has a nobility, I would almost say, an expressive beauty, of its own. The perfect

¹ Conze, Reise auf den Inseln des Thrakischen Meeres.

² Adler; Tsoundas, Μυκήναι.

symmetry presented by these two huge bodies rising on either side of the column does not strike the eye disagreeably in an image whose value resides rather in the idea it suggests than in refinement of workmanship. The lines bounding the figures meet happily those of the architectonic unit framing the bas-relief. As required by technical necessities, the animals' backs are slightly inflected, and nearly parallel to the sides of the triangular cavity above the architrave. The fore-paws are almost vertical, and in harmony with the ascending lines of the shaft of the column. Their point of attachment to the shoulder still leaves much to be desired; the paw is heavy and rudely modelled; its rendering does not suggest a claw ever ready to pounce and fasten on its prey. But an air of bold resolve is bodied forth in the intentional stiffness of these paws, pressing with the weight of the body on the plinth, as if they meant to sink and incrustate themselves with it. We think then that scant justice has been done to the bas-relief when, in connection with it, such terms as "round," "soft," and "tame" are used.1 The converse is true of it, and the general character of the form is hit off in a very satisfactory manner, whether in the outline, or within it in the modelling of the flesh. We divine the bone structure, and the amplitude of the muscles which gives the lion enormous spring and elasticity. If we do not find the harshness of a later archaism, it is because the sculptor had no need to lay stress on details. His bas-relief had an emblematic character, and stood at a certain height above the ground; the work sufficiently answered its purpose and fulfilled its part, if the elements composing it were clearly defined.

The artisan was thus authorized by the programme itself to simplify the rendering of his figures, and he has not been slow in availing himself of the privilege. He lacked space for deploying the lion's mane on the surface between the animal and the external border of the slab; hence he frankly suppressed it, along with the wisp of hair at the end of the tail. His lions, therefore, look like lionesses. The casual pedestrian was not so critical, and accepted them for what they were meant. He knew the symbol by heart; a detail more or less was not likely to put him out.

¹ Overbeck, Geschichte der griechischen Plastik; Brunn, Griechische Kunstgeschichte. Adler is more just.

If we have devoted so much of our time to the study of this bas-relief, it is because it is unique of its kind. Apart from the stelæ of the shaft-graves, this group is the only known work where the Mycenian sculptor has essayed to model figures on a large scale. On the other hand, the excavations have yielded a number of objects, certainly much simpler in character than the daggers or the Vaphio vases, but where the human and animal form has been introduced in a purely ornamental spirit. These objects, from their nature and destination, are rather industrial than artistic productions. We could, then, have placed them, with equal propriety, in the tablet, pottery, or metal series. Inasmuch as they help us to understand how this art interpreted the human form, some examples are engraved in the following pages.

The Human Figure as Decorative Element.

As the eve of the reader fell on the idol series, he cannot have failed to notice how utterly incapable was the Trojan artisan of the second village to draw from life. In the work he has handed down to us, we find little more than one statuette where some sort of attempt has been made to reproduce the proportions and form of woman (Fig. 201). The statuette, though infinitely rude, has been recognized by us not as native work, but either as imported from without or badly copied on a foreign model. next is a bronze ligure, if possible even more barbarous; its purpose is not clear. Yet the artisan, in his own way, showed himself susceptible to woman's beauty. Rude representations of the human face seen on the clay vases from Troy were suggested by his innate craving to recall her dear image. Such would be the specimen on Fig. 448, where eyebrows, nose, and eyes have been modelled in relief. As a rule the mouth, both here and elsewhere, is omitted. A third piece shows us protuberant breasts, and a vulva, indicated by an incised line and bounded by a salient seam (Fig. 244). This last detail is absent from another jar, but the ornament and dress are represented by a necklet about the neck, and by a scarf which surrounds the bust and is crossed in

¹ SCHLIEMANN, Ilios.

front (Fig. 369). Schliemann to the last persisted in viewing these abridged human visages as representations of the owl which, on the authority of an ill-understood epithet, he identified with the great Trojan goddess, the *Glaucopis Athene* of Homer. But the rudimentary human form appears on the prehistoric pottery of the American Indians, and on that of North Germany; the idea is common to the Mexican, Peruvian, and Pomeranian potter. The indications seen on the external face of the vase were an obvious allusion to physical charms which awake desire; and

Fig. 369.—Vase from second Trojan town. One-eighth,

inasmuch as they quickened memory, they may be said to have animated clay, and infused latent life into it.

The rare industrial relics which have come from prehistoric Thera, ere it was overtaken by a volcanic eruption, show no vestige, great or small, of efforts having been made to copy the human and animal form. In the Cyclades, on the other hand, sculpture is represented by a numerically rich but monotonous series of idols. A strange-looking object from Rhodes should also perhaps be placed in this period (Figs. 370, 371). The coarse modelling brings to mind the golden masks of Mycenæ. The eyes are closed; the lips are stiffened on the double row

of teeth, as if by the supreme agony of death. The technique has breadth, but of a clashing kind. It has nothing of that dry precision and striving after elegance which characterize the archaic productions of Camiros, classable in the eighth and seventh centuries B.C. There are no indications of hair on the

Fig. 370.—Terra-cotta head. Height of face, o m., 13.

face, and what is stranger still, of ears. The qualities and defects of this peculiar face are those that belong to a primitive epoch.

Tiryns sends us scarcely any figures, except idols. The very rudimentary image we print below is taken from everyday life, and represents a person standing before a table in the act of making bread (Fig. 372). The sex is not indicated, but the occupation is of the kind which generally falls to the lot of the women of the household in a primitive state of society; besides, the figure is clad in a long trailing tunic, which it is natural to associate with a woman. Remains of artistic furniture have been collected in the graves of Menidi, of Spata,

Fig. 37t.—Same head shown in profile. Total height, o m., 232.

and the rock-cut vaults at Mycenæ. The same type or thereabouts is seen on a couple of ivory plates from Spata and Mycenæ. They both belonged to some casket or other piece of furniture; the larger and best preserved is from Mycenæ (Figs. 359, 373). The type seems to have been quite the fashion; for it not only

¹ M. Tsoundas' draughtsman has omitted the two small holes for the nails that served to fix the plaque to the object which it adorned.

crops up again at Spata, but on two more specimens lately picked up in a Mycenæ grave whence has come the annexed piece

F10. 372.-Terra-cotta bread-maker. Seven-eighths.

Fig. 373.—Helmeted head. Ivory. Actual size.

(Fig. 373); one of them, however, is terribly worn. The head

1 εφημερίς, 1888.



Fig. 374.—Silver vase. Height, o m., 6; thickness, 1-2.

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(Fig. 373) is without a moustache or beard, but the male sex is inferred from the helmet surmounting it. Its shape is conical, like that of the statuettes, and is known from several other figures (Figs. 349-351); it ends in a crest, with an incised rosette on its upper face. The drawing is good, and the details have been so well attended to that they enable us to guess of what substance the helmets were made. If I am not mistaken, the head-gear consisted of a leather or felt cap, covered with metal plates, fastened together by circular strips likewise of metal, narrowing from base to crown. I think I can perceive the elasticity of the bronze in the curves of these parallel laminæ. The helmet-cap, which was composed of thin plates

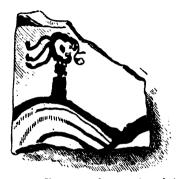


FIG. 375.—Fragment of vase. Actual size.

united with one another by wire or rivets, afforded an efficient protection against missiles or sword-cuts. The cheek-piece, similarly fashioned, covered the ear, and was passed under the chin for security. It is hard to understand, even on the Spata example, where the accessories are not so plainly indicated as they are here, how this head-covering could ever have been taken for a wig.¹ Our helmet comes out clear and distinct from the hair. This falls in a row of curls over the forehead, or in heavy masses on the nape of the neck, where it is crimped in three ridges. The features are regular, and instinct with dignity. The nose is long and straight. The eye is large, well cut, and almond-shaped. In the centre of the eyeball is a tiny round hole, into which was inserted a bronze nail or coloured stone, to mark the pupil. The mouth is small, and the lips of moderate size. What does this helmeted warrior, whom we

¹ MILCHÖFER, Athenische Mittheilungen.

find again and again in the bronze figures and ivory plaques, represent? Is he the armed-god, or perhaps the war-god who has been identified as such because he is portrayed standing before an altar between two worshippers on a Mycenæ painting? The fact is of no great importance. If the Achæans of Attica and Argolis had an Ares, a god of battle of their own, they must have conceived him in the semblance, arrayed and armed like those princes, divinely born, who led them against the foe.

A silver vase which M. Tsoundas excavated in a rock-cut tomb of the lower city affords us much valuable information relating to the physical appearance of the Mycenian population and the prevailing fashions of those days (Fig. 374). The



Fig. 376, -Gold ornament.

Fig. 377. -- Ivory plaque. Actual size.

technique is practically the same as that of the daggers. The ornament, except a supporting band fastened to the handle whereon leaves have been traced with the point, is entirely composed of incrustations (Fig. 374, on the left). The design, previously incised, is filled with minute gold laminæ and a dark alloy whose composition has not been determined. The yellow and black elements detach themselves admirably from the silver plate, and form a kind of tripartite mosaic. The surface of the handle is adorned by a double row of leaves; leaves re-appear in single and double file around the upper rim and the body of the vase respectively; here they frame a zone occupied by a series of helmeted busts, of which seven are in position. Some had got loose, but were found close to the goblet (Fig. 374, on the right). The leaves seen on the handle are partly gold, partly alloy; on the vase itself, however, they are of pure gold.

^{1 &#}x27;Εφημερίς, 1888.

Eyebrows, mouth, forehead, nostrils, and ears are marked with strokes made with the point on the gold-leaf.

Though not exactly identical, these heads bear a strong likeness to each other, and their profile does not greatly differ from that beheld on the ivories (Figs. 359, 373); with this difference, that here the line formed by the forehead and nose is not always quite straight. In some of the faces this line is broken at the root of the forehead, and the shape of not a few noses is almost aquiline. The upper and lower lip are closely shaven, and we are somewhat surprised to perceive about these busts the so-called American beard. For variety's sake, no doubt, some beards are pointed and fall under the chin. The wealth of hair is parted into three long curls, which tumble

Fto. 378.—Ivory plaque. Actual size.

about the neck and shoulder. These three pig-tails, with curly ends, re-appear in a clay vase which was picked up in the passage leading to the grave next to the one where the silver goblet was discovered (Fig. 375). It is but a small fragment on the surface of which we descry the head, arm, and upper part of a man's body, apparently dressed. The drawing is singularly rude, yet we think we divine a pointed beard, and the helmet-cap of our silver vase. The attraction which the female form exercised on the Trojan potter induced him to try his 'prentice hand in reproducing it. The mature art of the primitive epoch showed no less predilection for the physical charms of woman; which it not unfrequently introduced, and sometimes with the happiest results, into the decorative scheme of its more elaborate works. As a rule, the artificer shows her clothed in a tight-fitting tunic, with a petticoat trimmed with

horizontal bands. On the authority of these bands some have identified the Mycenæ costume with that of Chaldæa; but we think on unsufficient grounds. We fail to trace any resemblance between the Mycenæ costume and the Eastern kaunakes, a woollen fabric on which long hairs are arranged into a fringe-like trimming.¹ Nöwhere can the native dress be more dis-

Fig. 379.-Ivory handle Total height, o m., 16.

tinctly seen than on a gold figure from the third grave of the Mycenian acropolis (Fig. 376). In the round dots, in high-relief, of the skirt, we recognize metal buttons, of which countless numbers were collected in these shafts; whilst the bands between them, also in relief, are no more than silver or gold lace sewn on to the garment. Very similar female figures adorn a number

¹ HEUZEY, Une étoffe chaldéenne.

of ivory handles which belonged to bronze mirrors. On one of the Mycenæ plates are represented two women thus attired, in a sitting posture, and face to face (Fig. 377). In the hand of that to the right is held a leafy branch, and in the other an indistinct object. A faint outline is all that remains of the second figure. The costume is met again on another bit of ivory (Fig. 378). The bottom of the skirt is trimmed with a double flounce, and the upper part is covered with a net-wise pattern; whilst chevrons form the ornament of a fragmentary statuette from the same grave (Fig. 348).

The most original specimen of this class is a handle which was still fixed to the bronze mirror when M. Tsoundas brought it out of a pit excavated in the dromos of the second great

Fig. 380.—Fragment of ivory handle.

domed-tomb. It is self-evident that a woman was buried in it (Fig. 379). The design as a whole is of rare elegance. The handle, broken in twain, is a very free rendering of a palm tree. If below the terminal tuft of leaves the artisan marked the scaly appearance of the bark, he did not extend the indication throughout, but covered the best part of the shaft with bands winding around it, which he interspersed with rosettes and chevrons. Above the capital, made up of palms, are two seated figures, in whom we recognize women, because of their flounced petticoats. They are bent forward as if overcome with sleep; in the hand is carried a flower with a long stalk; the corolla is expressed by a gold-headed nail, which served to fix the ivory to the bronze plate. More flowers strew the surface around the figures. The group was repeated on the other side.

In this same pit (second grave) a second ivory plaque has been picked up (Fig. 380). The mount consists of two distinct pieces, the haft and the tablet which formerly faced the mirror. The handle has disappeared, except a tiny bit of the upper end, whereon is represented the lower row of palms which fall with so graceful a curve over the stem. On the tablet are two women in a sitting posture, apparently enjoying a friendly gossip. The bird which they hold by the feet, probably a dove, is

FtG. 38t.-Ivory handle. Actual size.

suggestive of the worship of Aphrodite. Two round holes about their middle mark the place of the nails.

If there could be any doubt that in the supports of his mirrors the artisan had designed to portray palms, they would vanish into thin air at the sight of another handle from the rock-cut graves at Mycenæ (Fig. 381). Carved on each side of the quadrangular haft rises a well-drawn stately palm; the markings

of the stalk of the leaf on either side of the capital are distinctly indicated. In the hands of the two women seen on this tablet is held a palm-leaf, which they use as a fan.

Despite distinct differences, the three mirrors are so remarkably alike, that one is tempted to think their having come from the same workshop, mayhap from the same artisan. A curious fact to be noticed about these female heads, is that all have short curly hair. Such crimping and dressing of the hair is very unusual in the monuments of this art. As a rule, women are portrayed, now with several plaits falling low over their shoulders



Fig. 382. - Glass-paste.

(tail-piece, Chap. VIII., and Figs. 325, 34%), now with a single twist (tail-piece, Chap. VII., and Figs. 334, 382). According to M. Tsoundas, this is not the only point which singles out these figures from among their fellows; the lips, too, are thicker, and the end of the nose wider than is generally the case with Mycenian figures, a peculiarity which the draughtsman has omitted in his drawing. The artist, it is argued, intended to represent foreign women, perhaps Syrian priestesses of Aphrodite. The conjecture is a likely one. In making palms the chief element of his decoration, the artist may have wished that the features of his figures should be in unison with the vegetable forms therein introduced. In that case we should have here a refinement not a little creditable to his taste.

¹ I confess to being unable to distinguish the peculiarity in question on the photograph from which Fig. 378 has been reproduced, and for which I am indebted to M. Koumanoudis. The surface of the ivory plates may have greatly deteriorated since they were taken out of the graves.

Animal Representation.

If at the early date when the second Trojan town was built the potter looked to the female figure for the elements of his incipient decoration, far more readily must he have turned to

FIG. 383.—Clay vase. One-third of actual size.

animals, as much simpler and more easily hit off. It is impossible not to recognize some such intention in a number of vases belonging to that remote period; where the recipient, except

F1G 384.-Terra-cotta vase. One-fourth of actual size.

handle and spout, is an abridged copy of some animal.¹ Thus in Fig. 383 we have the fat, heavy outline of a mother-pig, and the elongated head of a porcupine in Fig. 384. The three ¹ Schliemann, Ilios.

bands with incised strokes on the body of the pot are perhaps intended to represent the bristles. Whether moles, hippopotamuses, and cats furnished models for other vases is by no means so clear. The far-off resemblances said to exist to those animals may be merely due to lack of skill on the potter's part. His master-piece in this domain is a boar's head which formed part

Fig. 385. - Fragment of terra-colta vase. One-fourth.

of a vase (Fig. 385). The characteristic physiognomy of the beast is rendered with a certain degree of sincerity. The eyes, which are expressed by two small stones, prove that special care was bestowed on its execution. Next come diminutive cows of clay (Fig. 386), and dogs (Fig. 387); these were attributed by Schliemann to what he calls the fourth city. Although still belonging to

Fig. 386.—Terra-cotta cow. Three-fourths.

Fig. 387.—Terra-cotta dog.

the archaic period, they would of course be younger than the pieces just described. It is highly probable that we have here those mock sacrifices which were offered in place of live victims. Should a sacrificial or idol character be ascribed to a certain class of small animal figures, either bronze, lead, or especially clay, which have been found in such profusion at Mycenæ (Fig. 388), and in the

^{1 &#}x27;Εφημερίς, 1891.

adjacent tombs of Nauplia (Fig. 389) and Laconia? What makes us pause, at least for Argolis, is the fact that the worship of a lunar goddess, Io, was current there throughout historical times. She was represented under the semblance of a cow whose horns, circling over the head, recalled the crescent moon. This deity



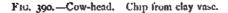
FtG. 388.—Bronze animal. Actual size.

seems to have been very popular at Mycenæ, for Schliemann says that he found fragments of about seven hundred cow figures on the acropolis, along with other animals, dogs, boars, and birds (Fig. 390). We cannot accept them all as idols. We doubt not but that a goddess with this bovine appendage was worshipped there; but

Fig. 389.—Terra-cotta cow. A trifle below actual size.

the horns in our opinion were reminiscent of those of the heifer usually sacrificed to the Argian deity; in the same way as, later on, Pan was represented with ram's horns, because that animal was immolated to him. Poor folk, however, could not afford so expensive an offering. If, then, the presence on the vases of a cow-head may be referred to that deity, I should be inclined to

view the countless clay simulacra from Mycenæ in the light of presentations by humble people in lieu of real heifers and bulls. The splendid cow-head of silver with golden horns from the fourth shaft-grave at Mycenæ is exceedingly valuable (Fig. 391). Ears, muzzle, and mouth preserve distinct traces of gilding. The form is good, especially the mouth and the thickness of the lips. The poverty of the donors cannot be invoked to account for the substitution which we find here; and yet the same idea sug-



gested the fashioning of this splendid head.² In their solemn sacrifices the ancients were wont to gild the horns of the victim to enhance its value; the usage already existed in the time of Homer; why should it not lead back to the Mycenian period? In this hypothesis the silver head, heightened with gold, would represent a choice victim whose blood had flowed before the altar, nay, perhaps an hetacomb expressive of the

¹ SCHLIEMANN, Mycenæ.

² TSOUNDAS, Muchvae.

chieftain's piety. What lends colouring to the assumption is the fact that small ox-heads of no artistic value, cut of thin gold plate and all similar, have been found in this grave to the number of about fifty-six.\(^1\) Stamped out by the dozen, such objects can only be symbols, designed to recall the remembrance of an holocaust, which was celebrated perhaps in honour of one of the dead buried in the tomb. The battle-axe interposing between the horns, where it is supported on a slender stem, would be the actual instrument which was used in bringing down the victims (Fig. 302).

Such offerings were calculated to familiarize the sculptor with the bull and cow type. In the Elgin collection at the British Museum is preserved an animal of the bovine species; but there is no indication of sex, and its origin is unknown (Fig. 393). We infer from the shape and dimensions of the rectangular slab in which it is carved that, along with another fragment engraved above (Fig. 287), it formed part of the external decoration of a grave. Its material, a greenish limestone, detaches itself from the grey rock of the structure. A pair of bulls, passant, and facing each other, exactly like the lions of one of our restorations (Pl. VI.), must have stood here. All that remains of the two slabs over which these figures extended in elevation is a fragment of the lower block. As far as these scraps will permit us to judge, the work seen here approaches, nay even surpasses, that of the basrelief over the Mycenæ gateway. The rendering of the relief is equally frank and vigorous, yet void of harshness, whilst the modelling of leg and paw is more realistic than at Mycenæ. treatment of the form is not so happy on two ivory figures, set back to back, which must have formed pendants on some small piece of furniture. M. Tsoundas, who brought them out of a rock-cut tomb at Mycenæ, is doubtful whether the animals belong to the ovine or bovine species.1 They are shockingly worn; nevertheless, in the least mutilated of these heads we guess rather a heifer with budding horns than a sheep (Fig. 394).

The lion is the animal which, with the bull, the Mycenian artist seems to have felt greatest pleasure in picturing. The king of the forest is depicted in various attitudes on incrusted daggers (Pls. XVIII., XIX.), and over the Mycenæ gate (Pl. XIV.), yet not one of these can challenge comparison with a small lion carved

^{1 &#}x27;Εφημερίς, 1888.

Fig. 391.—Silver cow-head. Two-fifths of actual size.

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in solid gold, and shown couchant on a golden plinth (Fig. 395).¹ The pose and the proportions of body and limb are true to nature, and admirably expressed. We may fairly place it immediately

Fig. 392.—Gold ox-head. Actual size.

after the most living images which Oriental art has produced of this type.

Unless we assume—and we have no authority for so doing
—that the type was imported from without, we must accept the

Fig. 393.—Bas-relief. Height, o m., 42; length, o m., 72.

fact, despite all that has been said to the contrary, that the lion still haunted the mountains of Peloponnesus and Central Greece at that early date, and that sculptors and engravers portrayed the animal from nature. Everybody readily acknowledges that the

1 SCHLIEMANN, Mycenæ.

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lion would scarcely play so great a part in the Homeric tales, if when these were written his presence on the Idæan, Sipylian, and Tmolian heights had not been of common occurrence. Again, when Aphrodite meets Anchises, no surprise is expressed at her couch being strewn with lions' skins, which the young hero had

FIG. 394.—Ivory young cow. Actual size.

captured in his native forests. To-day, however, the lion no longer roams over those regions; he is only met, and that very rarely, in the eastern valleys of the Taurus. The animal did not recede eastward until the Roman dominion, when the whole peninsula was covered with a perfect network of commercial and

Fig. 395.—Gold hon. Double actual size.

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military roads, and its most inhospitable parts were inhabited by a dense population, as the ruins scattered over districts now all but desert abundantly attest. Why should not the retrogressive movement of the animal have commenced in Greece, where the advance of culture since the Homeric age has relegated him far away to the rear of the Ægean, even to the sources of the Euphrates? Myths like that of the Nemæan lion seem to shadow forth the remembrance which the Hellenes had preserved of a distant past when Argolic shepherds dreaded the havoc which the lion's tooth and claw might effect in their folds. Mythical information, then, is in accord with that which the monuments supply. These show us the Mycenian artists very much engrossed with the lion, to whom they assign a large place in their works, of which a certain proportion convey the impression of having been copied from the original. That the disappearance of the lion was not the work of a day, is implied by the statement of

Fig. 396.-Ivory plaque. Length, o m., 93.

Herodotus, to the effect that towards the beginning of the fifth century B.C. the animal still existed in Thrace, and that, along with wild bulls, he was chased in Peloponnesus by the Achæan chiefs of Tiryns and Amyclæ. Furthermore, he tells how, in Pæonia, lions had molested the convoys of the Persian host. This declaration is borne out by Xenophon, Aristotle, and Pausanias. In Europe at the present day, they write, lions are only found in the district between the Achelous and Nestos. It is easy to guess how this was brought about. With the influx of fresh tribes, the narrow valleys of Hellas ceased to be uninhabited; as a consequence of it, the mountains were deprived of their timber and the lion was driven to the north-

¹ HFRODOTUS.

² XENOPHON; ARISTOTLE; PAUSANIAS.

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ward, where he kept his ground for centuries on the wooded ranges of Pindus, Olympus, and Pangæus. When, after the Macedonian conquest, Hellenic civilization penetrated this region far and wide, the animal had no choice except to retire. But if

Fig. 397.—Gold ornament from Tomb III.

during the Medic wars he still infested the Thracian champaigns, why should he not, seven or eight centuries earlier, have had his home in the thickets of Taygetus, Menelaus, and Cyllenæ, where the climate is warmer than in Thrace? The difference

Fig. 398.—Ivory plaque. Length, o m., 78.

of temperature between Peloponnesus and the upper valleys of the Scamander, Cayster, and Mæander is very slight indeed.

This brings us back to our first proposition, namely, that the lion type was not borrowed by the Mycenian artist from Oriental wares, for then he would have imitated it on trust, never having had the opportunity of comparing his copy with the model. If the likeness of the lion is not everywhere rendered with an equal degree of life and sincerity, it is partly because his work is of varying merit, and partly because, by dint of repetition, the image assumed a more or less conventional aspect. Such would be the group so often beheld on engraved stones, where the lion is represented bringing down an ox, a stag, or an antelope. Nevertheless, here and there we come across metal and ivory plates of a purely decorative character, exhibiting on the whole a bold and frank treatment (Fig. 396). This does not by any

Fig. 399.-Ivory box.

means exhaust the list of animals figured in the work of the native artist. Thus, a gold ornament shows two stags lying down atop of each other (Fig. 397), whilst a wild goat, agrimi as it is called by modern Greeks, is pictured as vainly trying to escape from a hound which has fastened on to her belly (Fig. 398). The dog is ill-drawn. As to the horse, he appears both on the sepulchral stelæ, on one of the daggers (Fig. 360), and on a bronze plaque (Fig. 388); whilst a long-horned ram has been pressed into service to decorate the four sides of a casket which was found in the Menidi grave. The tablets

composing the box in question are divided into two sections, each occupied by rams moving two abreast (Figs. 399, 400).¹ Again, rams fill the field of a circular ivory plaque which

Fig. 400.—Decoration seen on ivory box drawn out.

¹ According to Pausanias, there was a crouching ram on a monument which was shown as the grave of Thyestes, midway between Argos and Mycenæ. A ram-head also adorns a pillar-like stela found near to Mycenæ, with an inscription to Persephone. But it is probable that the monument dedicated to Thyestes was

must have served as lid to a second casket (Fig. 401). The animals are lying down, their bodies turned towards the centre

Fig. 401. -- Ivory disc.

of the plate, their legs folded against the outer rim. A less symmetrical but more varied arrangement is seen on what

FIG. 402.-Wood disc. Actual size.

must have been the lid of a wooden box (Fig. 402). In

of no great antiquity, and there is nothing to show that the ram had a symbolic and sepulchral character in the Mycenian period.

the central hole was fixed a knob, to facilitate prehension. Remembering how timber at Mycenæ has been destroyed by damp, one would be surprised to find a wooden piece in such good preservation, but for the fact that it comes from Egypt. With M. Puchstein, who first published the antiquity, we have no hesitation in ascribing to it a Mycenian origin. Its style and composition widely differ from Egyptian art. The



FIG. 403. - Ivory dog.

surface is divided into four compartments. In one we see a lion pulling himself together ere he leaps upon his prey. In front of him are two antelopes, whom fear at sight of their terrible foe has paralyzed into quiescence; a little farther we find the oft-recurring group of a griffin chasing an antelope or other animal of the deer type (Fig. 361). The movement of the crouching lion vividly recalls the netted bull of the Vaphio goblet (Fig. 362). The resemblance is even more marked in

Fig. 404.—Gold ornament from Tomb III.

the landscape framing the figures. These are parted from one another by radiating bands, which represent a broken, stony ground, similar to that of the Mycenæ daggers and the Vaphio vases. As at Vaphio, here also the trees have been dwarfed for reasons of space. Finally, if the draughtsmanship has nothing to say to that of Chaldæa, Phœnicia, or Egypt, it bears a close analogy to the best works of Mycenian sculpture. Hence, we are

left with but one possible explanation. The small casket to which our lid belongs must have been fashioned somewhere on the Ægean, and carried by commerce on the banks of the Nile, where the Egyptian who purchased the piece valued it sufficiently to have it buried along with him.

If this art has handed down realistic representations of wild animals, dogs did not bring it luck. We should very often be

Fig. 405, -Six-footed animal of baked clay. Two-thirds of actual size.

sorely puzzled as to his identity, but for the function which he fulfils (Fig. 398). A knife-haft from Menidi shows us perhaps the best specimen of dog-portraiture (Fig. 403). We confess to being surprised to find a pair of animals face to face on a gold ornament, whose head and tail can only belong to cats (Fig. 404). The animal, although known in its wild state, does not appear to have been domesticated in Southern Europe until long after that epoch.

Frg. 406.—Gold griffin from Tomb II.

The Mycenian artist seems to have had feeble leanings towards winged creatures. We have seen doves hovering around small temple models wherein we have recognized chapels of Aphrodite (Figs. 111, 288, 289). Again, doves are held in the hand of two women figured on the handle of a mirror (Fig. 380); whilst a gold ornament shows us a very conventional rendering of two eagles face to face. On one of the daggers panthers chase wild ducks (Pl. XVII.), and a couple of swans

1 SCHLIEMANN, Mycenæ,

look at each other from a golden leaf.¹ Chisellers, whether in ivory or metal, have rarely put in action those great aquatic birds, with long necks and huge wings, which began to creep in the decoration of pottery, and which the ceramists of a later age were so fond of introducing into their works. As far as we know, there is not a single example of a partial or whole bird modelled in gold, stone, or clay. If the sculptor allotted to it so small a place in his compositions, it was with no set purpose, but because he had to please tribal chiefs. The wealth of these mainly consisted of great droves of cattle and sheep; and their prowess showed itself in warlike expeditions, or in hunting wild beasts. The wary artists ministered to the vanity of the chieftains

Fig. 407.—Ivory griffin. Actual size.

by perpetually bringing under their eyes the thoroughbred horses that drove their chariots, the oxen that tilled their lands or were being fattened for the table, the wild bulls and roaring lions, as well as the timid deer which they chased in the thickly-tangled overgrowth of their native hills. On the other hand, animals occupying a low grade not unfrequently crop up in the most quaint fashion, where, too, one would least expect to see them. Thus, insects, and above all mollusks, seem to have met with special favour with the native artist. These he so often repeated as to develop or simplify them by routine work, causing them to fade into mere ornamental forms, in which it is sometimes hard to trace the original whence they sprang. Such types, owing to their diminutive size and consequent tenuity of detail, could not easily find a place in the repertory of genuine sculpture,

¹ SCHLIEMANN, Mycenæ.

which even then was venturing on works in the round boss, to cover the façades of imposing edifices or the surface of furniture with bas-reliefs. But the shapes were largely used by the goldsmith, and especially the ceramist, who married them with designs evolved from manifold combinations of lines. We shall have more to say in regard to the latter in a future chapter.

Among nationalities the most diverse, no sooner has man acquired some proficiency in his art, than he ceases to be content with copying the varied forms which he sees in the world around him. His ambition soars to greater heights; he

Fig. 408.—Ivory griffin from bee-hive grave. Actual size.

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wishes to emulate Nature, and have types that shall be all his own. To invent, however, really fresh and newly-minted forms is an undertaking far beyond his power. All he can hope to distil from his imagination is that it shall unite types necessarily distinct in Nature into composite forms of a more or less attractive character, according as the sense for the plastic arts is more or less alive with the nation amongst whom they are elaborated. The first essayal made at Troy in this direction resulted in a six-legged animal (Fig. 405). This incipient stage has long been left behind in Achæan Hellas, where the conceptions of the mind are shadowed forth by an art which handles materials as it lists. We shall find here fictitious beings such as the griffin and sphinx among the wall-paintings and intaglios;

but although seemingly of indigenous origin, these animals are old acquaintances of ours. Ere Mycenian culture had risen on the horizon of time, both were popular in Egypt and throughout Anterior Asia. The types are too distinctive and characteristic, too sharply defined to permit us to consider their presence on the shores of the Ægean as a mere coincidence, or that they were re-invented here. Hence, we are left with the inevitable conclusion that the master-artist must first have beheld them on imported wares. Yet they were not slavishly copied by him; by adding certain delicate touches to his griffins and sphinxes

Fig. 409. - Ivory sphinx. Actual size.

he made them stand out from their Egyptian and Asiatic prototypes. The Mycenæ griffin sailed straight from Egypt, and is a compromise between an eagle and a lion. The griffin of the Euphrates valley is always figured with crested plumes, which rise from the back of the neck straight up in the air.\(^1\) This crest is everywhere to seek at Mycenæ. Sometimes feathers are not indicated on the neck; but in their place we find curl-like appendages which fall on the body precisely as with Egyptian griffins.\(^2\) At Mycenæ, as on the banks of the Nile, the griffin is symbolic of strength and agility. His stretch of body when

¹ History of Art.

² WILKINSON, Customs and Manners (1878). See also FURTWÄNGLER'S article entitled Gryps.

running at full speed is well seen in the annexed drawing (Fig. 406). Elsewhere he is pictured devouring a boar or bull (Fig. 407), whilst an ivory plaque from a Mycenæ rock-cut grave shows how individual could be the handling of this theme in the hands of the native artist (Fig. 408). In this instance the griffin is crouching, with wings outstretched; his head is turned in such a way that the artisan was unable to show the egret-wise appendage, which elsewhere falls on the back.

FIG. 410.-Ivory sphinx. Actual size.

So, too, the sphinx is of Egyptian origin; but one is tempted to think that he came to Hellas by way of Syria, where his image underwent modification, and became somewhat more complicated. Winged sphinxes are very rare in Egypt, where they are met with exceptionally, and then with very long wings, which overshadow the back part of the body, the ends hanging down as if broken. The composite animal, whether in Phœnicia, Assyria, or Mycenæ, is always given wings turned back on themselves (Figs. 409-411). His bust is not that of a woman; yet the smooth chin and soft contour of the face belong rather to

the gentle sex than the sterner one. The head has lost the "imperial," which in Egypt indicated that the visage so adorned was intended for the king's likeness. There is a peculiar detail about the Mycenian sphinx which distinguishes it from that of Anterior Asia; his head is covered with a low tiara or cap, from the middle of which rises a kind of tuft or tail, brushed back

Fig. 411.-Sphiax. Glass-paste.

by the wind. This quaint appendage occurs in every instance where the attitude of the animal allows it to be visible, and it returns on engraved stones. As the art of the following age will drop it out of sight, we are a little surprised to find the detail on a fragment of pottery, where it adorns a winged personage. The chip in question is from Troy. Taking into

Fig. 412.-Gold hippocampus. Actual size. Tomb III.

consideration the character of the design and the feeble depth below the surface at which it was found, we cannot place it much further back than the seventh century B.C.¹ Then, too, the hippocampus or sea-horse, terminating in the scaly tail of a fish (Fig. 412), crops up in the series of stamped gold leaves from Mycenæ. The type does not seem to have been as popular or so well thought of as that of griffins and sphinxes, or as it will become with the decorators of the classic age. The latter animals may have been indebted to their foreign origin, which gave them an uncommon and superior air, for their rapid and enduring success. Hence it is that they outlived other fictitious types composed in the same spirit, and which glyptic art will bring to our knowledge.

¹ Schliemann, Ilios.

Glyptic Art.

Rude make and imperfect drawing are no sure guides in helping us to single out those intaglios which by right ought to be ascribed to the archaic period. In some instances, the engraving no doubt is clumsy enough to betray a 'prentice hand as yet supremely ignorant of methods and tools, yet we come across others quite as rudimentary, but which nevertheless point to a later date. At first they were jumbled together and confused with those that will form the subject-matter of the present study. What permits us to distinguish between the different sets is the nature of the grave furniture found alongside of these gems, and the images engraved on them. To prevent mistakes of the same nature, we will first define the style of the oldest intaglios by a survey of such well-authenticated gems as have been picked up either in the graves or among the ruins of edifices belonging to the Mycenian period. These gems will furnish us with the criterion we are in need of: they will tell us what were the materials and tools which the engraver employed, the themes he affected, and how he interpreted the living form. Then, and only then, when all the elements of this indispensable definition have been brought together, will it be possible to compare these typical intaglios with a number of other gems that have found their way into collections, public or private, but whose origin is unknown. Fortified with these comparisons, the series we are building up will be enriched with a considerable number of specimens, respecting whose affinity we need feel no concern.

It was whilst travelling about the pleasant isles of the Archipelago, that Ross collected the first gem specimens of a time that went before the classic age. Other explorers followed him in search of those strange intaglios to which this pioneer, who opened up so many paths to science, had drawn attention.

¹ Ross, Reisen auf den griechischen Inseln.

² F. LENORMANT, Intailles archaïques de l'Archipel grec). NEWTON, Essays on Art and Archæology. MILCHÖFER, Die Anfänge der Kunst in Griechenland: Die Inselsteine. ROSSBACH, Zur ältesten Griechischen Kunst and Griechische Gemmen ältester Technik; Intagli arcaici della Grecia e dell' Etruria. FURTWÄNGLER and LOESCHKF, Mykenische Vasen.

Hence archæologists have applied the name of island-stones (Inselsteine) to these gems; the appellation, however, is incorrect and out of date, for intaglios of the same nature are plentiful on continental Greece, especially in Laconia and Argolis. Thence have come the finest of all, those that will enable us to determine the character of the art on which they are dependent, an art that reckons the buildings of Tiryns and Mycenæ, together with the sculptures and artistic objects that have been discovered among their ruins, among its masterpieces. Accordingly, the only fitting denomination applicable to this class of antiquities, the one we shall employ throughout this study will be, "Mycenian intaglios."

Both around the Ægean and in Anterior Asia and Egypt. the same want suggested the idea of engraving forms in hard substances; every man of standing in giving his orders or in transacting business, wished to affix a mark that should be an emblem of his own individuality, the representation of his will. on some soft material which air or firing would harden. Even when the use of writing shall become general, many centuries will go by ere men will take to signing their name on public or private documents, instead of affixing their seal to them. The habit of writing the name did not obtain until the commencement of what we call the modern era. There was then a far more cogent reason why seals should have been indispensable in societies that knew not how to write. Hence it appears that when chiefs and heads of families wished to have a personal signet, whose wellknown impression should be a standing witness to subjects and neighbours, they demanded this service of metal.1 Although the number of engraved stones from the Mycenæ shaft-graves is exceedingly small, Schliemann brought out several rings of gold and silver, whose large signets are adorned with engravings of surpassing merit. This is to be accounted for from the fact that the goldsmith was far in advance, his hand much better exercised and more dexterous, than could be the case with other artisans, who, like him, worked for these wealthy native On the one hand, the cost of the material of which these signet-rings were made was far beyond the means of the

¹ M. Tsoundas (Έφημερίς, 1889) thinks that the largest proportion of these gems served as ornaments rather than seals, in that no trace whatever of a mount is to be found on those that are not set in rings (Έφημερίς, 1888).

middle and lower classes, and on the other hand, stones such as the hematite, steatite, agate, sardonyx, cornelian, onyx, chalcedony, amethyst, jasper, and rock-crystal, which lent themselves kindly to be engraved, were common enough in some parts of Greece, or easily obtained by traffic. Even those which we call semi-precious were much lower in price than gold. The fashion for seals became so general that the poorest would not be without signets of their own. To meet this ever-increasing demand, they accustomed themselves to treat stones by the intaglio pro-As a natural consequence, engravers were multiplied and became more and more skilful, whilst the country far and wide was ransacked for the finest materials to be engraved. The wealthy liked certain stones because of their soft and delicate hues; they sought others for their semi-pellucidness, and rock-crystal for its perfect transparency. If intaglios in metal have become rare in the domed- and bee-hive graves, it is because both classes of buildings belong to the last days of the Mycenian period, but engraved stones are very plentiful. The proportion of engraved gems at Vaphio, as against gold signets, was forty to three. This holds good with Menidi and the vaults of the lower city at Mycenæ. The popularity of engraved stones is explained by the fact that they not only served as seals set in a ring or worn loose about the person, but also as ornaments, like those at Vaphio, where they were found mixed with amethyst beads, balls, etc., in the necklaces and bracelets which adorned the All the stones, whether their purpose was practical or ornamental, had a hole drilled into them, with the exception perhaps of some which the sculptor never finished. In it was formerly inserted either a stem to fix the stone to the bezel, or a pivot on which it turned, or a wire to thread the gems along with the other elements of the unit. Those at Vaphio had tiny gold wire run through them and rounded off at either end. Among the instances of this glyptic art, we scarcely ever come across more than two distinct forms; these, however, offer many varieties. The most common of all is in the shape, or thereabouts, of a greatly magnified lentil, with a tendency to a more or less elongated oval. The second form is longer and narrower, and not very unlike a sling ball or acorn (Fig. 421, 18-21). Some rare specimens of triangular tablets and imperfect cylinders are also mentioned. The employment at an early date VOL. II.

of pebbles selected for their colour, shape, and polish from among those which the sea or the mountain torrents rolled on to the beach, may have had something to do in the adoption of these shapes. Some of these pebbles are round, others oviform, but all were perforated and mixed with the prettiest and gavest shells on the shore, to form rustic necklaces. Next came artificial pebbles. Among the many uses demanded of or terra-cotta fusaïoles. fusaïoles by the tribes that fashioned them by thousands, ornament was certainly one of them. Then, too, they seem to have thought. in very early days, of adding to the value and decorative effect of the stones, real and artificial, by tracing upon them more or less rudimentary designs with the point. But when society advanced. and the use of seals became general, they ceased to be content with mere rud ratchings on the stone; and felt their way to cutting and modelling the image in its depth. Nevertheless. the ovoid and lentoid forms were too much engrained in the habits of the people to be easily set aside; all the more that the latter lends itself easily and without effort to adorn the bezel of a ring.

We will begin our description with those pieces which, owing to the place where they were found and the circumstances attending their discovery, may be placed with the utmost certainty in the early part of the archaic period. It is self-evident, therefore, that the first place must be given to intaglios chiselled in solid metal. Of these the most interesting specimens were yielded by the excavations which Schliemann carried on at Mycenæ.

If the marble and clay idols take us back to the beginnings of sculpture in the round and relief, it is not the same with the engraving process. The first notion of this art must be sought in the ornaments incised on the Trojan cylinders and fusaïoles (Figs. 55, 56). But the distance which separates these shapeless designs, hastily traced in the moist clay, from forms graven in hard substances, is a wide one. Intaglios were non-existent at Troy and Thera; and none have been discovered in the prehistoric necropoles of Oliaros, Amorgos, and Melos by MM. Dümmler and Bent. Perhaps the habit of using seals may have arisen in the Achæan kingdoms of Peloponnesus, whence it spread all over the Ægean. The art, at Mycenæ, had already made considerable advance when the shaft-graves were raised.

During the space of time which intervenes between these and the domed-buildings, execution became more correct and broader; yet the engraving exhibited on the gold bezel of many a signetring from the shaft-tombs reveals a full-blown art. The fourth grave has given us two such rings. Although the exploits they represent are quite distinct, judging from their size they can only have belonged to women; for they are so small that they

Fig. 413.-Gold ring with bezel.

will not go beyond the middle of the little finger of a man's hand of ordinary size. On the first intaglio are two men in a chariot hunting a stag (Fig. 413). The hunter leans over to shoot at the animal. He grasps the bow with his left hand, and with his right lets fly the arrow from the string. The other man stands erect behind; his hands are half raised to gather the reins, which, however, cannot be seen in the field. The stag is figured bound-

FIG. 414.—Gold ring with bezel.

ing onwards above the horses, and turning round his head. But the spectator conceived it at speed in front of the horses. The stelæ have made us familiar with the shape of the chariot (Fig. 355).

The second ring shows a battle scene (Fig. 414). Four

¹ These intaglies are all reproduced, except one or two, from drawings made upon impressions for which we are indebted to MM. Koumanoudis, Murray, Furtwängler, and Babelon, of the museums of Athens, London, Berlin, and the Paris Cabinet respectively. The drawings are of the same size as the originals.

warriors are artistically grouped in the field. The action culminates in the centre, where a warrior, striding forward, has seized his opponent, who sinks on his knee before him, by the hair and neck, and is in the act of dealing him his death-blow. The prostrate man still tries to protect himself with his raised sword. From the right, one of his brethren-in-arms rushes to the rescue. He approaches under cover of his huge, semi-cylindrical shield, and brandishes a long spear against the victor. His head-dress is a helmet, with a long waving plume. On the other side of the group a disabled combatant sits on the ground, and supports himself on his right hand. His left knee is bent up close to his body, his right leg stretched out; a pose which Greek statuary will reproduce more than once. As in the former intaglio, here also the men appear to be clothed only with a loin-cloth or short drawers.¹

In the gold quadrangular ornaments from the third grave, which at first were supposed to have been strung together to form necklaces,² we recognize movable bezels, analogous to those usually seen on Egyptian rings.³ They help us to understand why the engraving of the figures was so careful and finished; they were seals set on pivots. One face of the bezel only is engraved. The first seal shows the struggle between a man and a lion. The hunter has seized the beast round the neck with his left hand, whilst with his right he thrusts his sword into the beast's throat. The animal's front claws have fastened upon the outstretched leg of his destroyer. The man wears the usual garment, loin-cloth, apron, or drawers. His attitude is amazingly natural, spirited, and vigorous (Fig. 415).

The artist shows no less skill in the second intaglio, representing a hand-to-hand fight between two warriors (Fig. 416). The one is dashing forward from the left, and plunges his sword

¹ H. Kluge (Vorhomerische Abbildungen Homerischer Kampfscenen, in the Neue Iahrbücher, &c., 1892) and Otto Rossbach (Zum ültesten Kriegswesen, in the Philologus, 1892) have brought in juxtaposition this and similar combat scenes figured on the intaglios, with episodes analogous in character to those found in the Homeric narrative. The conclusion to be drawn from these coincidences, some of which are truly striking, is that the fundamental element of the Epos goes back to an earlier epoch than many of the cantos; a conclusion which we have reached independently. Moreover, the poet had probably before his eyes monuments akin to those that have been discovered at Mycenæ.

² Schliemann, Mycenæ.

³ History of Art.

into the neck of his sinking foe just above the edge of the shield. The wounded man wears the helmet we have already seen several times. On the third ornament is seen a lion looking back, whilst running speedily away (Fig. 417). The bent fore-legs do not apparently mean that the lion has sunk to the ground; it was the artist's simple way of expressing swift motion. The archaic art of Hellas furnishes us with many an instance of this conventional mode of rendering.



F16. 415.-Gold prism.



Fig. 416.—Gold prism

The intaglio which has excited the curiosity of archæologists most, is not from a grave, but one picked up with other costly objects that must have been enclosed in a chest (Fig. 90, D), among the ruins of a house southward of the slab-circle. The surface of the bezel is entirely covered with engraved figures and accessories of the most varied kind (Fig. 418). To the right of the spectator is a tree, pine or olive. Under its shade sits a woman with her right hand in her lap; whilst she holds a



Fig. 417.-Gold prism.

Fig. 418,-Bezel of gold ring.

bunch of poppies in her left. The other figures are also women, but in an erect position. Behind the tree another small figure appears to be gathering fruit from it. In front of her stand one small and two large figures. The former seems to be on a heap of stones, and in each hand is held a leafy branch. The figures are presenting fruit and flowers. All the women have long, projecting noses, and enormous eyes. Their costume is exceedingly

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peculiar. The head-dress is a species of turban or scarf folded several times round the head, and adorned in front by a diadem. from which rises an ornament resembling a cluster of three flowers. The ends of the turban hang down behind: about the neck a double row of beads. Whether the bust was covered or not it is difficult to say, on account of the smallness of the image: other stones preserve traces of the drapery (Fig. 419, 14). Here the fine texture of the fabric shows the dress, which fits tightly over the bosom, and is girt round the hips, but below the waist it falls away from the body, and ends in four or more flounces, like those we have so often met. In the field above, a sun and crescent moon; the wavy lines below them are probably intended for the sea. Below these again is a double axe similar to that seen in the gold plate from the fourth grave (Fig. 302). Above, on the left, is an idol: it grasps a lance in its left hand, and is entirely covered with a huge circular shield, the feet alone appearing below it (Fig. 414, and Pl. XVIII. 3). On this side, along the edge, the space is filled up with heads of animals, shown full face. They bring to the mind the bucrania of classic art. This picture has been differently explained as often as it has been described. The only point upon which nearly all are agreed is that it represents a worshipscene, and that the seated figure in front is a goddess, who is receiving the homage of the other personages. But what goddess? Opinions, or rather conjectures, are not at one. Some identify the goddess with Rhea, to whom fruits and flowers are brought by her nymphs. The double axe is the sign of Zeus, the son of Rhea, whilst the armed man typifies her servants, the Curetes or Corybantes: and the heads of animals are meant for lions sacred to Rhea.2 For others, the principal figure is Aphrodite, surrounded by her priestesses; like the Canachian Aphrodite of Sicyone, she holds a bunch of poppies in her hand.³ The heap of stones whereon is perched the small figure with flowers in both hands, is meant for an altar. In the thought of the artist the figure was not standing upon the altar, but behind it, in the second plane.4 Others, again, are more especially attracted by

¹ This often went by the name of πλεκτή ἀναδέσμη (Helbig, Das homerische Epos).

² MILCHÖFER, Die Anfänge der Kunst.

⁸ Pausanias, ⁴ Fi

⁴ FURTWÄNGLER, Mykenische Vasen.

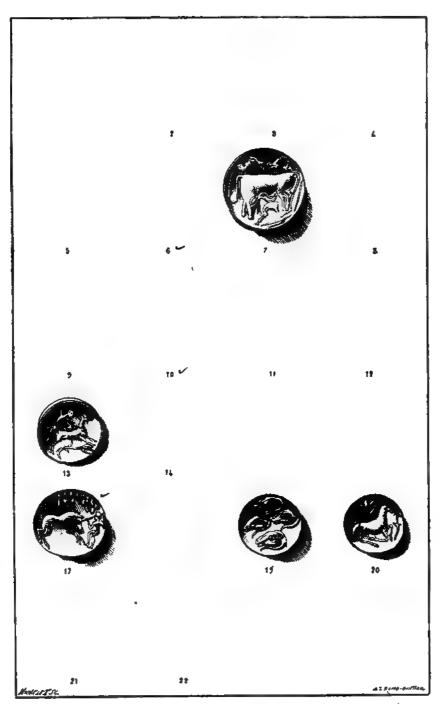


Fig. 419.—Mycenian integlios.

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the small-armed idol; according to their version, it is intended for Zeus, armed with the ægis and the thunderbolt. The seated deity is Mother Earth, surrounded by her nymphs and the trees she produces, whilst the animals' masks would stand for river-gods.¹

In face of our scant knowledge relating to the beliefs which swayed the minds of the men of that period, we dare not pronounce between these contending theories and give a name to the deity that plays here the principal part. But the number and variety of the symbols grouped about the intaglio permit us to draw the following conclusion. The Mycenian mythology of those days was more advanced and developed than might have been supposed, had our information rested solely on the barbarous clay idols collected in these graves.

Engraved figures and symbols, like those of the first intaglio,

FIG. 420.—Bezel of gold ring.

re-appear on the signet of a second ring: they number four heads of animals, and three unmistakable heads of oxen, with long, curved horns (Fig. 420). Again, the signet of another gold ring which M. Tsoundas brought out of a bee-hive grave in the lower city two years ago shows us a worship But the honours, instead of being addressed to a god, are rendered to an altar, towards which three women, wearing the inevitable flounced skirt, are moving in slow, processional steps. One hand is raised; in the other, which is lowered to the ground, are held flowers. Behind them a tree (Fig. 421, 23).2 On a ring of unknown origin, but whose technique is the same as that of the foregoing intaglios (Fig. 422), the altar and seated deity are figured together. As in the Mycenæ rings, here too the main axis of the bezel is parallel to the finger. The costume of the goddess is that which has so often been described. She is sitting before an

¹ TSOUNDAS, Muchuqu.

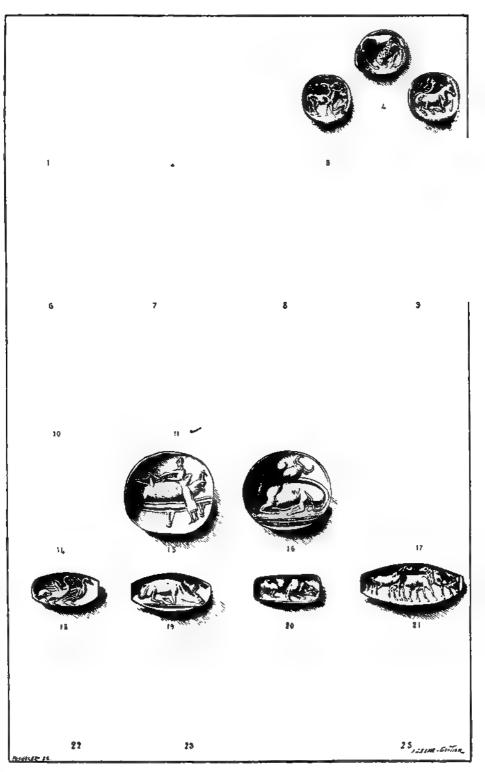
altar or a table of offering. Her hair is gathered into a knot behind, whilst the head is adorned by a kind of diadem, from which rises an ornament fading away at the back into a point, äµπυξ (Fig. 418). The right hand holds up a mirror of elliptical shape, the other rests on her lap. Before this personage stands another woman similarly arrayed, the edge of whose dress is distinguishable around the neck. One hand is raised, the other is lowered and holds a flower. Behind rises a tree. In the first figure Aphrodite has been provisionally recognized.

A Mycenian origin will unhesitatingly be ascribed to a gold ring, said to have come in 1887 from a grave at Salonica (Fig. 423). It represents a subject familiar with these artists, the struggle between a man and a lion. The make of the Mycenian artist betrays itself in many ways: the drawing in of the body at the middle, the short drawers, and the arbitrary treatment of the ground. Yet, despite a certain dryness in the design, the movements of men and animals are rendered with rare spirit.

Less valuable, although engraved with the same care, are a number of signet-rings recently excavated at Vaphio and Mycenæ. Represented on a gold specimen from the former locality are a man and a woman, who appear to be dancing before a tree which rises out of a great jar (Fig. 424, 9). The remaining space is filled with symbols difficult to define. Although the subject does not lend itself to be easily explained, we are almost tempted to think that we have here an orgiac scene. Among the gold intaglios yielded by the Mycenæ bee-hive tombs, is one whose theme is almost identical with that of a red jasper signet discovered at Vaphio (Pl. XVI. 19); in both are figured a stag with head raised, and a bunch of flowers popped in the field.² The same group is reproduced on two other glyptics. Here a pair of horses tethered to a palm tree are lying down and tossing their heads about. They apparently have cloven feet (Fig. 424, 10). There, parted by a tree, are two sphinxes set face to face (Fig. 421, 22). As will be noticed, the head-dress is the same as that of the ivory figures. It consists of a low tiara with a raised border, and a long plume falling behind (Fig. 410). Nearly the same arrange-

¹ The ring in question has been published by M. de Gobineau, *Catalogue d'une collection d'intailles asiatiques*. It was acquired by M. Danicourt, who presented it to the Museum of Péronne.

² 'Εφημερίς, 1888.



F10. 421.-Mycenian intaglios.



ment re-appears on a third ring, engraved with less care. In a wood two horses, set face to face, are rearing; between them are indistinct strokes indicative of a tree (Fig. 419, 22).

Then, too, bronze rings with engraved signets were used by people that could not afford anything better; but rust has destroyed most of them. Although in a very poor state, we divine a contest between two quadrupeds, one of which was perhaps a lion, like that seen on a Vaphio specimen.\(^1\) Makebelieve signet-rings of the precious metal, e.g. of gilt bronze, were not uncommon; one such intaglio was lately excavated; to it still adhered the thin gold-leaf which once had entirely covered it.

As will be seen by these examples, intaglios in metal are much less rare than was at first believed. Yet when compared with those in hard stones, they may be said to form the exception.

Fig. 422.—Bezel of gold ring.

Fig. 423, -Bezel of gold ring.

Engraved gems had the one great advantage of lending themselves equally well to be set in a ring of gold or one of common metal, or again to form necklaces and bracelets, thereby adding to their value. This is why they vastly out-number intaglios in metal, the first-born of glyptic art. It is self-evident that we could not think of reproducing all the gems to be found in the museums of Europe. We were obliged, therefore, to select from among the impressions at our disposal the most interesting ones, whether on account of the theme, the merit of execution, or the clearness of the types engraved on them. In our estimation, a certain proportion of these glyptics has no claim to be classed among those due to the Mycenian engraver. Nevertheless, some of these doubtful specimens have been admitted in our plates. If we print them, it is for the sake of being able to explain more precisely, through the differences observable between these and authentic Mycenian gems, the characteristics which distinguish

the latter and which help us to recognize them, when all other information as to their origin and the circumstances of the discovery are wanting.

To have attempted to describe separately the ninety-six stones, which we have divided into five groups, as we have done for



Fig. 424.-Mycenian intaglios

intaglios in metal, would have carried us too far (Pl. XVI., and Figs. 419, 421, 424, 425). First we will consider the origin and material in which the intaglios are cut, and follow this up with some general observations; we shall next endeavour to find out how far the choice of subjects which found favour with the glyptic artist was influenced by the destination of the objects, and in what

spirit he treated them, as well as how he interpreted form. We append here a brief catalogue of the intaglios in question, as a preliminary to our reflections and researches. In Pl. XVI. will

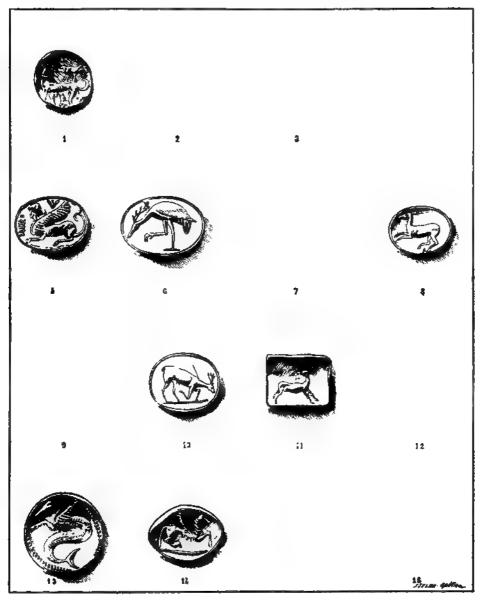


Fig. 425 - Mycenian intaglios.

be found twenty-one intaglios which to us appear best calculated to convey a very high notion of the talent and individuality of these artists. If we apply the title of artist to them, it is because we think that they fully deserve the term.

PLATE XVI.

- 1. Rock-crystal. British Museum. Catalogue of Gems, 1888, No. 107. Ialysos.
- 2. Chalcedony. Br. M. (?) 1
- 3. Rock-crystal. Scarabæoid. Br. M. Catal. 125 (?)
- 4. Steatite. Br. M. Catal. II. (?)
- 5. Chalcedony. 'Εφημερίς, 1889, Pl. X. 33. Vaphio.
- 6. Sardonyx. 'Εφημ. 1889, X. 27. Vaphio.
- 7. Rock-crystal. 'Εφημ. 1888, X. 17. Mycenæ.
- 8. Brown pebble. Br. M. (?)
- 9. Sardonyx, with gold wire mount. 'Epnu. 1889, X. I. Vaphio.
- 10. Hematite. Scarabooid. Br. M. Catal. 113. Egypt.
- 11. Brown jasper. Berlin Museum. Mykenische Vasen, Pl. E, 11. Crete.
- 12. Sardonyx. 'Εφημ. 1889, X. 18. Vaphio.
- 13. Rock-crystal. Br. M. Catal. 57 (?)
- 14. Black jasper, with white stripes and gold mount. ${}^{\prime}E\phi\eta\mu$. 1889, X. 3. Vaphio.
- 15. Chalcedony ring. Schliemann, Mycenæ, 175. Mycenæ.
- 16. Red jasper. 'Εφημ. 1889, X. 32. Vaphio.
- 17. Crystal. Scarabæoid. Br. M. Catal. 122 (?)
- 18. Agate. Das Kuppelgrab, Pl. VI. 3. Menidi.
- 19. Red jasper. 'Εφημ. 1889, X. 31. Vaphio.
- 20. Sardonyx. 'Εφημ. 1888, X. 2. Mycenæ.
- 21. Chalcedony. Br. M. Catal. 123 (?)

FIGURE 419.

- 1. Brown agate. Cone. Paris. Chabouillet, Catal. (1858), 1264 (?)
- 2. Sardonyx agate, with three layers. Paris. Catal. 1402 (?)
- 3. Light chalcedony. Cone. Paris. Catal. 1133 (?)
- 4. Cornelian. Cone. Paris. Catal. 1295 (?)
- 5. Cornelian. 'Εφημ. 1888, X. 34. Mycenie.
- 6. Sardonyx. 'Εφημ. 1888, X. 26. Mycenæ.
- 7. Agate. 'Εφημ. 1888, X. 18. Mycenæ.
- 8. Onyx. 'Εφημ. 1889, X. 11. Vaphio.
- 9. Agate. 'Εφημ. 1888, X. 3. Mycenæ.
- ¹ The query indicates that the origin of the gem so marked is unknown. Some few stones in the British Museum are not referred to in the Catalogue, for the simple reason that they have been acquired since its publication.

- 10. Agate. 'Εφημ. 1888, X. 31. Mycenæ.
- 11. Pale cornelian. Berlin. Myk. Vasen, E, 36. Crete.
- 12. Chalcedony. Berlin. Myk. Vasen, E, 34. Elis.
- 13. Agate. 'Εφημ. 1888, X. 35. Mycenæ.
- 14. Cornelian. 'Εφημ. 1889, X. 34. Vaphio.
- 15. Red jasper. 'Εφημ. 1889, X. 38. Vaphio.
- 16. Agate. 'Εφημ. 1889, X. 35. Vaphio.
- 17. Chalcedony. 'Εφημ. 1889, X. 15. Vaphio.
- 18. Cornelian. 'Εφημ. 1888, X. 8. Mycenæ.
- 19. Amethyst. 'Epnu. 1889, X. 25. Vaphio.
- 20. Red onyx. Schliemann, Mycenæ, 174. Mycenæ.
- 21. Ring of red jasper. Tsoundas, Μυκηναι, V. 5. Mycenæ, 1892.
- 22. Gold ring. Mycenæ, 1892.
- 23. Agate. Mycenæ, 1892.
- 24. Green jasper. Mycenæ, 1892.

FIGURE 421.

- 1. Sardonyx. 'Εφημ. 1888, X. 23. Mycenæ.
- 2. Sardonyx. Br. M. Catal. 79. Cnossus.
- 3, 4, 5. Three faces of a triangular tablet of red jasper. Br. M. Catal. 41. Peloponnesus.
- 6. Cornelian. 'Εφημ. 1889, X. 37. Vaphio.
- 7. Green porphyry. Berlin. Myk. Vasen, E, 29. Athens.
- 8. Cornelian. Berlin. Milchöfer, Anfänge, 44, b. Crete.
- 9. Cornelian. Berlin. Myk. Vasen, E, 10. Athens.
- 10. Sardonyx. 'Εφημ. 1888, X. 22. Mycenæ.
- 11. Sardonyx. 'Εφημ. 1888, X. 14. Mycenæ
- 12. Agate. 'Εφημ. 1888, X. 11. Mycenæ.
- 13. Berlin. Milchöfer, Anfänge, f. 59, b. Peloponnesus.
- 14. Chalcedony. 'Εφημ. 1888, X. 25. Mycenæ.
- 15. Agate. 'Εφημ. 1888, X. 36. Mycenæ.
- 16. Cornelian. 'Εφημ. 1889, X. 10. Vaphio.
- 17. Sardonyx. 'Εφημ. 1888, X. 30. Mycenæ.
- 18. Sardonyx. 'Εφημ. 1889, X. 36. Vaphio.
- 19. Cornelian. 'Εφημ. 1889, X. 24. Vaphio.
- 20. Sardonyx. 'Εφημ. 1889, X. 23. Vaphio.
- 21. Sardonyx. 'Εφημ. 1889, X. 28. Vaphio.
- 22. Gold ring from excavations of 1892. Mycenæ.
- 23. Gold ring. Tsoundas, Μυκήναι, V. f. 3. Mycenæ, 1892.
- 24. Cornelian. Mycenæ, 1892.
- 25. Agate. Tsoundas, Muκ. V. 6, Mycenæ. 1892. VOL. II.

FIGURE 424.

- 1. Cornelian. 'Εφημ. 1889, X. 12. Vaphio.
- 2. Yellow jasper. 'Εφημ. 1889, X. 2. Vaphio.
- 3. Sardonyx. Schliemann, Mycenæ, 313. Mycenæ.
- 4. Sardonyx. $E\phi\eta\mu$. X. 26. Vaphio.
- 5. Amethyst. Schliemann, Mycenæ, 315. Mycenæ.
- 6. Sardonyx. 'Εφημ. 1882, X. 36. Vaphio.
- 7. Amethyst. Triangular prism. 'Εφημ. 1889, X. 5. Vaphio.
- 8. Sardonyx. Das Kuppelgrab, VI. 2. Menidi.
- 9. Gold ring. 'Εφημ. 1889, X. 39. Vaphio.
- 10. Gold ring. 'Εφημ. 1888, X. 43. Mycenæ.
- 11. Rock-crystal. Mycenæ, 1892.

FIGURE 425.

- I. Sardonyx. Br. M. Catal. 87 (?)
- 2. Green jasper. Br. M. Catal. 83 (?)
- 3. Agate. Br. M. Catal. 73. Greek Islands.
- 4. Hematite. Br. M. Catal. 80(?)
- 5. Brown chalcedony. Scarabooid. Br. M. Catal, 112. Egypt.
- 6. Chalcedony. Br. M. Catal. 121. Camiros.
- 7. Green schist. Cone. Br. M. Catal. 93 (?)
- 8. Agate. Scarabooid. Br. M. Catal. 116 (?)
- 9. Sardonyx. Br. M. Catal. 39(?)
- 10. Agate. Scarabœoid. Br. M. Catal, 118(?)
- 11. Green schist. Br. M. Catal. 101 (?)
- 12. Hematite. Br. M. Arch. Anseiger, 1890, p. 69 (?)
- 13. Burnt Sardonyx. Br. M. Greek Islands.
- 14. Steatite. Br. M. Catal. 21 (?)
- 15. Green porphyry. Br. M. Catal. 76. Crete.
- 16. Yellow steatite. Br. M. Catal. 82 (?)

The stones from which the engravers of this school oftener cut their gems were the many varieties of the agate, for the sake of their creamy white tone; the onyx, sardonyx, chalcedony, cornelian, and the like. Rock-crystal seems to have been an expensive material, which was reserved for carefully-wrought pieces. Yellow, green, and red jaspers are not unfrequent, and here and there porphyry occurs. Precious stones, such as the amethyst, are still more rare. Semi-soft stones, the steatite, hematite, and schist, are seldom found among intaglios whose

origin is well established.¹ Glass-pastes must have been common enough,² but they were easily destroyed; hence it is that so few intaglios in that material have survived to our day. What were the types which made up the repertory of engravers who were contemporary with the shaft-graves at Mycenæ, and the domedtombs of Greece generally?

We can point to a large number of gems with representations of the human form, male and female. Adoration scenes appear more particularly on gold signet-rings (Figs. 418; 421, 23; 422). But figurations of dancing men and women are also meant for worship scenes or for deities (Fig. 424, 9); here we see a woman alone, her hand carried to the thick masses of her long hair (Fig. 424, 1); there a second is holding by the neck a quadruped, horse or ram, erect on his hind-legs (Fig. 419, 14); whilst two women appear in Pl. XVI. 5. Now we have a personage whose sex is not defined; his costume is a long flowing robe which falls to his feet; he stands near to a griffin who has a halter round his neck (Pl. XVI. 16); the same garment, perhaps a sacerdotal costume, is worn by a second man, who carries an axe on his shoulder (Fig. 424, 4); and a third is slaughtering a pig or bull stretched upon a table (Fig. 421, 15). These are obviously preparations for a sacrifice. Personages playing with monsters or other animals: the man with outstretched arms, who holds up two lions in the air (Fig. 419, 21), the woman who squeezes the neck of a couple of swans (Fig. 424, 7), may be placed in the same class of themes. A loin-band, and hair falling low behind, do not help us much in determining the character to be attributed to their owner (Fig. 421, 1).

The talent of the artist appears to have exercised itself quite as often on scenes of battle and of the chase. The theme sculptured on the stelæ of the Mycenæ shaft-graves occurs twice over, once on a gold signet-ring (Fig. 413), and the second time on a gem from Vaphio (Pl. XVI. 9). In the first of these images the king chases a stag; in the second appear horses at full speed, but the object of the pursuit, man or beast, is not indicated. Single combats are portrayed on gold and stone signets from

¹ I see but one example, at Mycenæ, of the use of the steatite, and one only of the employment of the hematite. Neither of these stones appear either at Vaphio or Menidi.

² Έφημερίς, 1888.

Mycenæ (Figs. 414; 416; 424, 3; 426).¹ The arms used are the spear and sword; and two distinct shapes of shield, whose dimensions and characteristics have already been pointed out. Elsewhere, the heroes are fighting a lion (Fig. 415), or a boar (Fig. 419, 17), or pursue (Fig. 419, 5) and overtake (Fig. 419, 13) antelopes and wild bulls (Fig. 419, 24). Again, a couple of hunters are pictured in the act of fastening together the paws of a lion which they have brought down, so as to carry him home (Fig. 419, 15). The actors in these scenes always appear naked; but we may safely conceive them with drawers, and a band to fasten these in front. If they are not plainly indicated in every instance, it is because of the smallness of the image; but they are none the less to be distinguished in some of the intaglios (Figs. 414; 415; 421, 1; 419, 11, 21; 424, 3). The women's dress is ever the same; a flounced skirt, which assumes a

Fig. 426,-Sardonyx.

crescent shape above the ankle (Figs. 418; 419, 14; 421, 23; 422; 425, 2; 424, 1, 7, 9). The employment of conventions to which attention has already been drawn is also resorted to in these gems; the ground, for example, indicated now by scales under the feet and above the heads of the personages (Pl. XVI. 12; Figs. 413; 414; 419, 17), now by a simple horizontal band (Pl. XVI. 6, 9, 14, 15, 16; Figs. 421, 16, 19; 419, 7; 424, 1, 3, 11).

The form of all others which the engraver seems to have taken most pleasure in studying and reproducing was that of animals. A glance at any gem-collection will prove the truth of our words, where their image occurs far more frequently than that of man, whether by itself or in combination with other elements. The lion was a great favourite with him, and brought

¹ From the image which Schliemann has given of Fig. 426 (*Myana*) no guess can be hazarded as to the nature of the subject. His drawing was made to favour his interpretation that we have here a man and a woman sitting.

him luck (Figs. 417; 421, 12). He has shown him at full speed (Figs. 417; 421, 12), or ere he makes his spring (Fig. 421, 20); now at rest, now stretched at full length on the earth (Pl. XVI. 6; Fig. 421, 19); here crouching and leaning on his fore-paws, there roaming in solitary grandeur (Pl. XVI. 14); now accompanied by the female (Fig. 419, 6) or another lion (Pl. XVI. 18); now licking and toying with his cub (Pl. XVI. 7). Elsewhere we see him rushing on his favourite prev. antelopes, stags, and bulls (Pl. XVI. 12; Fig. 421, 14). we have a curious variant on the famous group of the Mycenæ Gate, in a couple of lions, whose fore-paws rest upon an altar (Pl. XVI. 11, 20). The artist was no less attracted towards the ample and powerful proportions of the bull and cow. seen bulls sometimes exposed to the attacks of man and the lion; at other times in peaceful enjoyment of green pastures. Here he is moving along, his head turned on his back as if to listen and survey the scene (Fig. 419, 18), there his head is bent to browse the grass (Fig. 419, 7). Above his back appear two ram or mouflon-heads. Then, too, in a meadow there are two bulls lying down by the side of each other; one is shown in profile, and his mighty sides squarely face the spectator. The head which projects beyond the neck of his companion is all that we see of the second beast (Fig. 421, 16). The awkwardness of the arrangement seems to have dawned upon the artist; for elsewhere he tried another expedient, but with hardly greater success; a pair of bulls are lying down atop of each other, head to foot, and foot to head (Figs. 421, 24; 419, 8). Again, two cows are figured feeding their young, their head turned backwards to lick the calf suspended to the udders (Pl. XVI. 15). A very similar attitude is given to a doe suckling her fawn (Fig. 421, 10); a second doe merely looks back towards her suckling (Fig. 424, 5). Animals of the deer type seem to have been as often portrayed as those of the bovine species; we meet twice over an antelope walking along (Pl. XVI. 1; Fig. 421, 11). A third has its head bent as if to graze (Fig. 424, 11). Wild goats appear in couples amidst shady glades, which are indicated by leafy branches popped down in the field (Fig. 419, 9, 10). first throws back her head as if writhing in an agony of pain, caused by the arrow which has just struck her (Pl. XVI. 19); the second is lying among flowering shrubs (Fig. 419, 20). Two

more goats are butting at each other; they stand erect on their hind legs preparing to butt again (Pl. XVI. 13; Fig. 419, 23). A pair of long-horned antelopes nearly repeat the same attitude, save that here a tree interposes between them (Fig. 419, 22).

Horses are probably meant in the field of a lentoid gem from Vaphio. representing an elongated face without horns (Fig. 421, 21): there is much cleverness in the variety of the attitudes. Birds are more rare: I know of but one small intaglio where their portraval, two wild ducks with flapping wings, is seen (Fig. 421, 18). Nor have fishes often been depicted: the only instance which occurs to me are two dolphins (Fig. 424, 2). with the sister arts, here too the fancy was not content with the forms presented by Nature: it called in also those fictitious beings that we already know, and created composite types as well, not to be found in the works of the sculptor. There, separated by a palm tree, we have two sphinxes couching and facing each other (Fig. 421, 22): here griffins are grouped in like fashion, one on each side of an altar surmounted by a column (Fig. 421, 25). A third griffin, couchant, fills the very elongated surface of a gem with his huge wings (Fig. 424, 8). A single head, seen full face, appears over a double body, intended no doubt to represent griffins (Fig. 421, 17); elsewhere the engraver seems to have tried to draw a bird's bill. Griffins and sphinxes are familiar enough; but here comes a type as yet unseen either on gold-leaf, glass-pastes, or ivories. The attitude is not uncommon, a pair of lions erect on their hind-legs; but the band around the body, the thoroughly conventional rendering of the mane, which has all the air of a cloak thrown over the shoulders of the brutes, are new and peculiar features. The garment or mane is interspersed with dots in relief, and it rounds off into an appendage which detaches itself from the body, after the fashion of the lower part of a frock coat. The fore-paws are raised like arms; they rest upon a shrub planted in a vase, and support two water-jugs of very elegant shape (Figs. 419, 16; 424, 6). The only instance where this type had appeared, before glyptic art brought it to our knowledge with a series of examples which are beginning to be rather numerous, is a bronze vase from Cyprus, on the handle of which is depicted a similar group to the one just described. Whether the vase was

¹ I thought at one time to detect a squamy fish's skin on the back of the lions; but the interpretation found little favour. I would submit, however, that it would

manufactured in Peloponnesus or Cyprus is unimportant. This much is plain: the type, with its sharply-defined lines, was very popular, in the Mycenian epoch, throughout the eastern basin of the Mediterranean. The figures holding up the jugs have provisionally been identified with water-genii. The vases would stand for the springs to which they give rise, whilst the shrub intervening between them would represent vegetation kept alive by rains and fountains.

We will close this list with three intaglios engraved with images taken from still life. The first is a signet adorned by six heads of animals seen full face, belonging to a gold ring from Mycenæ (Fig. 420). On the second signet appear four rams' heads (Fig. 419, 19); and on the third there is a helmet, with horns (Fig. 421, 6) curving in front in true ram fashion, like those of the helmets borne by warriors of other intaglios (Figs. 359, 373, 414).

Thus ends the series of types which may be taken to represent the best authorized intaglios of Mycenian glyptics. only remains to examine their fabrication and origin. strikes one from the first is that these gems one by one, even where the work seems to have been most rapid and least forced. exhibit a cleanly cut and admirably firm outline; this is the only quality which can be discerned where the drawing is a mere linear sketch; but the consummate skill of the engraver is best seen in the image within the contour. The modelling, particularly of some animal figures, is at once broad and singularly simple. The roundness of the bodies is marked with rare frankness by means of planes of feeble depth, very skilfully superimposed upon one another; the prominence of bone and muscle under the skin is forcible, yet void of harshness. The movement is always well caught and naturalistic. The quality is even apparent in nude figures of men, where the artist's inexperience

well coincide with the character that has been provisionally ascribed to the figures, and that we see no trace of hairs which would stand for the mane. Other examples of this same type are cited by Milchöfer (Anfänge) and Rossbach (Annali, 1885). The latter brings forward another specimen which was found at Orvieto in Italy. The stone, a sardonyx, presents a curious and unique variant on the known type. It portrays a man who stands erect with outstretched arms between two genii. These, owing to the man's pose, cannot raise the vase as high as in the other intaglios. The engraving is in pure Mycenian style.

betrays itself in a somewhat dry and meagre treatment. He is over-anxious to declare the main divisions of the human body, and the result is undue emphasis. Then, too, the unnatural drawing in of the body above the hips recurs on the intaglios (Figs. 413; 415; 419, 15, 21; 421, 1; 424, 3). But we find more than one bull, antelope, and lion where it is impossible to detect any tendency to systematic deformation; on the contrary, the design is both impressive and broad.

It would be wrong to conclude from the above observations that animal figures are all perfect. No doubt some come very near to that point (Pl. XVI. 6, 7, 12, 14, 15, 18, 19), and the defects observable in many examples, sometimes even among the most carefully executed, should rather be accounted for by the programme which the artist was required to carry out than His composition had to fit a narrow field his unskilfulness. whose shape he could neither change nor modify in any way. Hence it was inevitable that the action of his figures should be forced, their heads turned on their backs more than was natural, and made to look towards the field, when technical necessities required them to be stretched contrariwise (Figs. 419, 8, 18, 24; 421, 11, 24; 424, 5). Elsewhere one might be tempted to tax him with too precise and mechanical a symmetry; for example, where the figures of a group of two, set face to face, or one above the other, are as like as two peas. One could wish that some of Nature's noble freedom, who never repeats twice over the same thing at every point, had been with the artist (Pl. XVI. 15, 20; Figs. 419, 16, 22, 23; 421, 17, 22, 24, 25; 424, 2, 10). First impressions, however, are not always reliable, and we should do him grave injustice in allowing them undue weight, for we must remember that he was not always free to indulge his own inclination. When we deplore the little variety instilled in these groups, we yet recollect their symbolic or heraldic character; their being the representation of a religious or civic idea, i.e. allegorical figures, or the armorial bearings of a chieftain or clan. In either case, the engraver dared not improve or modernize the image, where the special destination of the gem, as well as the meaning attached to the emblem, were hallowed by tradition. Considering the restrictions put upon him, and the fetters from which he could not shake himself free, we should have none but grateful acknowledgments for the elegance and

dignity which he has imparted to these forms. This style of drawing has not always preserved, among other races and at other times, so bold a character or so vivid a feeling of life. So, too, we must allow for the horror vacui which, ever present with the primitive artists of every country, prompted them to fill in every available space. This feeling, coupled with a desire to define the locality, suggested the frequent insertion of flowers, branches, and trees, and unnecessary details such as the two mouflon-heads beheld above an ox on a Mycenæ intaglio (Fig. 419, 7). Perhaps the myth of the Chimæra has no other origin. The ingenious and subtle mind of the Hellenic race was not satisfied unless it could discover a meaning for every form which it saw brought together in the field, but whose juxtaposition was probably accidental, a mere expedient and artifice of the decorator.

We now know the stereotyped themes of Mycenian glyptics whose style we have passed in review. We are, then, in a position to pick out among intaglios of mysterious or doubtful origin, but which belong to remote antiquity, those that should be ascribed to the archaic period. Mistakes in this direction are so unlikely to arise, that we need not take them into serious consideration. Among the choice specimens of this art which figure in our plates, we do not think there is one to which the attribution we claim for them can be seriously disputed. Our gems, like those whose birth-place and antiquity are warranted by the Excavation Journal, are characterized by shapes, themes, accessories, and execution which are common to both sets.

No doubt the pair of bulls, the one moving along peacefully, the second his head bent between his legs preparing to rush against his foe, will never be surpassed (Pl. XVI. 2, 17). Yet the attitude and technique of the bull devoured by a lion (Pl. XVI. 12), and two or three more lions, are quite up to their high level. There is an intaglio in the British Museum (Pl. XVI. 3) which on the first blush might rouse some slight suspicion, in that it not only is a scarabæoid, but has a cable or denticulated border, neither of which forms have as yet been encountered on any well-established example. But let us remember that Mycenian gems are by no means uniform in shape; that the relations of the Mycenian world with Egypt

¹ Murray, Catalogue of Gems.

were frequent enough to have put into the mind of the native artist that here was an opportunity for freely imitating Egyptian scarabs. One of the commonest subjects treated by these engravers was the group composed of some victim on which the lion had made his spring—stag, ram, or bull—as in Plate XVI. 21. for instance. It is the same with the stag brought down by the hunter, and the wild bull careering in woody stretches (Pl. XVI. 8, 10). Pendants to these are to be found at Mycenæ and Vaphio (Figs. 413: 419, 18), whilst the pair of lions fronting each other on either side of an altar (Pl. XVI. 11), the two goats erect on their hind-legs (Fig. 419, 23), are but varieties of a group which recurs again and again on bas-reliefs and intaglios (Pls. XIV., XVI. 20; Fig. 421, 25). If the cuttlefish is portraved but once on a gem of doubtful origin (Pl. XVI. 4), we are aware that it has furnished the Mycenian decorator with one of his favourite themes. The two fishes introduced into the field alongside of the mollusk in question re-appear on a Vaphio intaglio (Fig. 424, 2).

It is now the turn of the remaining gems to make good their right to be comprised in this category; but there will be no necessity to dwell at any length on them. Such representations as a conflict between two warriors (Fig. 421, 7), or a man standing between two goats erect on their hind-legs (Fig. 425, 7), or a boar's chase (Fig. 421, 13), or a lion devouring an antelope (Fig. 421, 9), or hunting a stag (Fig. 425, 3), or the portraval of a man apparently hovering in mid-air above the animal, but whom the artist conceived running by the side of the beast, (Fig. 425, 12), are not of a kind to arouse our suspicions. point of fact, the primitive perspective of this last intaglio dates the piece. A female dog is sucking her pups (Fig. 425, 1). Where is the anomaly? Was there an outcry because a cow was discovered feeding her calf, and a doe her fawn? We see a man carrying a big fish suspended from a string (Fig. 425, 4); none the less the theory has been advanced that the natives of that period ate no fish. But on what ground do they rest their assumption? This they have forgotten to tell us. At any rate, the general outline and costume of the fisherman are precisely similar to those of the best-authenticated Mycenian figures. One is tempted to see deities in a certain number of these images:

¹ Arch. Anzeiger, 1800.

women who draw the bow, for example, or hold goats by the horns, or are embracing swans (Figs. 419, 11, 12; 425, 2). The costume, the theme and action of all these effigies are but echoes of those we have already examined. Here, however, are two fictitious types as yet new to glyptic art. The first is a personage with an ass's head, and, it would appear, the claws and tail of a grasshopper (Fig. 421, 8); next comes a nondescript creature, a man's body with the head and long horns of an antelope (Fig. 425, 15). Both monsters carry heads of game, suspended from a pole. The former re-appears in a Mycenæ fresco (Fig. 431); the second, though differently composed, belongs to the same order of ideas. They are dæmons, who inhabit forests and mountains, in whom we divine the ancestors of the satyrs of classic poetry. A gold-leaf gives us the hippocampus (Fig. 425, 13; 412).

Whether the intaglios we have cited one by one up to the present time have a civil state or not, we think they are all instances of an art whose palmy days were in those centuries which witnessed the rise of the Tirynthian and Mycenian edifices.

The next in order of succession are some specimens chosen from the prodigious quantities that reach us from the Archipelago (Figs. 419, 1, 2, 3, 4; 425, 5, 14, 16). Four at least of these intaglios have a far more archaic appearance than the most carelessly executed gems ever brought out of the Argolic or Laconian graves. Could aught be more barbarous than the image where we rather divine than discern a man with outstretched arms, grasping a sceptre in each hand; or the pair of winged animals, a bull and a horse, or Heracles struggling against Nereus, Ocean's old sire? The work consists of parallel or cross hatchings, in which we feel the jerkings and shakings of a plodding and clumsy hand: their technique in no way resembles that of our gems, where the exposed parts are always smooth; where, too, inner cuttings are juxtaposed by the engraver for the sake of bringing out certain details, the folds of drapery, wisps of hair, and the like. The bird perched on the back of an ox, the lion lying down in front of a tree, are certainly a step in advance, but the manner is none the less cold and dry; there is a total absence of that sincere spontaneity which we find so attractive in genuine Mycenian intaglios. Accordingly, it would be wrong to imagine that the gems of this worse-than-bad style can take us back to the beginnings of glyptic art. What the most shapeless of these stones shadow forth is the profound decadence which descended upon this art after the fall of the Achæan royalties, when it was thrown back and kept at a standstill a hundred or two hundred vears. Those intaglios which exhibit better drawing are no test of efforts made by an incipient art towards progress, but rather of a fresh start, a re-awakening to life and activity under the influence of Oriental models. Thus, the winged and bearded bull is reminiscent of Chaldæan and Assyrian palaces. As to subjects such as the fight between Heracles and Nereus, or Prometheus bound to a rock, we have found no trace of them in the Vaphio and Mycenæ glyptics. Wherever we find intaglios that may be explained away by these and the similar myths transmitted to us by Greek letters, the chances are about even that we are in presence of gems dating no farther back than the ninth or eighth century B.C.1

The rude manipulation of some of these gems has caused them to be considered unduly old; the same error has been committed in regard to intaglios of a much later date for a reason exactly the reverse of this. If these have been confused with genuine Mycenian gems, it is because the themes beheld on them are very simple, and of the kind which archaic art so much affected, namely, the portrayal of one or other of those animals whose image so often appears in the works of our engravers. In such cases it is extremely difficult to differentiate between the really old and the comparatively modern pieces. The difference seems to me to be this. If the artists of the sixth and fifth centuries B.c. do not surpass their far-off predecessors in their imitations of Nature, and scarcely infuse more animation and intelligent fidelity into them, they yet have better tools, and therefore a lighter hand; the engravings have all the air of having come more easily to them. I should incline, though falteringly, to assign this recent date to a pair of gems preserved in the

¹ The wrong attribution referred to above will be found in Milchöfer's otherwise suggestive and instructive study, entitled *Inselsteine*. He was the first to approach a subject fraught with difficulties, and wrote his book some time before the discoveries made at Mycenæ and Vaphio. Dümmler, on the other hand, already attributes the date we have adopted for the island-stones to those of Melos, which he published in the *Athenische Mittheilungen*. Among the intaglios which Rossbach has printed in the *Zeitung* and *Annali* respectively, the number of pieces of certain Mycenian origin appears to us exceedingly small.

British Museum (Fig. 425, 8, 11). I feel no hesitation for two others, representing a doe struck by an arrow, and a stork crowned with stag-antlers (Fig. 425, 10, 6). In these two last the field is plane, instead of being more or less concave, as is always the case with Mycenian gems. Our impression is further strengthened by the fact that the chalcedony with the stork figured on it was picked up in a tomb which cannot be older than the fourth century B.C. 1

To avoid confusing epochs one with another, it will be well to form a clear notion relating to the processes which the Mycenian engraver employed in his work. Examination of the intaglios leads to the following conjecture. As a rule, the gems are regular in shape. Such perfect regularity as we see here is absent from the polished but uncut stones of the primitive period; nor would simple friction against harder materials have been more successful in obtaining the desired form. The engravers probably began by cutting the outline on crystal and agate, and used for the purpose a lathe or wheel, dropping upon it from time to time moist emery powder or crushed corundum. This done, they set their tools to the actual engraving of the stone, penetrating it and modelling the image. To attack quartz, and even harder materials, tools finer and more resisting than the chisel were required. We guess the intervention of two kinds of instruments: a drill ending in a rounded button, which was used for the circular hollows,² and turned by a movable bow, like that of a modern centre-bit or wimble, and one for the straight lines. This drill was probably worked with the hand; for the lathe is a comparatively late invention. It was introduced by Theodorus of Samos into Ionia in the sixth century B.C., and does not seem to have been known in Anterior Asia until the eighth century B.C.3 The holes indicating the main divisions of the figure having been drilled into the stone, the engraver connected them with one another, using points and hand-saws;

¹ The famous and many-coloured vase, now among the treasures of the British Museum, was brought out of this tomb. It represents the struggle of Thetis and Peleus.

² The Homeric carpenter already sets a rotary movement to his tool by means of a leather strap (*Odyssey*). As to the drill with rounded end, it is no more than the *ferrum retusum* of Pliny.

³ Information relating to glyptic processes are detailed at some length in *History of Art*.

he first traced the outlines and minute details, then smoothed over and rounded off the work with a turning-chisel. Finally, the edges of most of the holes were carefully beaten down to obtain an even surface; a few, however, were left in the rough, about the jaw and shoulder of the Mycenæ lions for example (Pl. XVI. 20), whilst the big round eyes beheld on a number of other images are no more than the holes with which the engraving was begun (Fig. 421, 11). A species of scissors with curved blades or bores appear to have been found. They were used to cut circles or segments of circles, and were worked with the finger.

Compared with the implements which a Pyrgoteles or a Dioscorides will have to hand, those of the Mycenian engraver appear very imperfect, slow, and difficult to handle. We admire all the more that by dint of patient and steady work he should have turned them to such good account. The more we study remote antiquity, the more we are amazed at the miracles performed by the artisans of those early days, perhaps slaves, for whom time did not count.

Originality and Characteristics of Mycenian Sculpture.

The reader has seen marble, clay, and bronze statuettes, sculptures modelled, whether in relief or intaglio, on metal, wood, ivory, marble, or gems, pass before his eyes, and he may perhaps have asked himself the question if all these pieces were executed in the country which has preserved them to us, or if a certain proportion was not imported by commerce to the islands and the Greek continent. The question has been implicitly answered in our former volumes, when every object that seemed to bear the seal of Egyptian or Phoenician industry was ascribed to the land where it had been found. On the other hand, a work of the chisel which was picked up in a tomb at Memphis has been adjudged by us to the Mycenian sculptor, because the taste, make, and certain features recognizable in it are those we discern, more or less distinctly, in all the works that have just been passed in review. The better we define these general characteristics, the easier will be our task in apportioning the share which should be allotted to imitation in this art, and in

finding out to what extent the artist derived his inspirations from models brought to him by trade. The only way I know to satisfactorily solve and set at rest the problem, is to subject the more important pieces of the series we have formed to a final revision. In casting our eye over the sculptor's work, we are struck at the small proportion of foreign elements to be found in it, and the predominance of characteristics that constitute the unity of these scattered images, and the originality of the mind of which they are the spontaneous expression.

This originality is already obvious in the idol series. The oldest would scarcely be quite so barbarous, had their makers had models under their eyes to help their inexperience. If with the passage of time the artisan lost somewhat of his clumsiness. we feel that a vague remembrance and reflex of better-defined forms were with him, when he blocked out some of the divine simulacra. Such images accidentally and momentarily seen, but of which he had no specimens to hand, appear none the less to have suggested this or that movement, this or that attitude. Nevertheless, even when we feel most certain of being in presence of imitations, like the lead statuette discovered at Troy (Fig. 201), and the two gold leaves from Mycenæ (Figs. 289, 290), the impression remains that these are no true copies. Not one of these statuettes is, or claims to be, the exact reproduction of one of those effigies of Egyptian or Syrian gods impressed or cast in the same moulds for centuries by Oriental artisans. very choice of the material of which they are made is significant, and a standing witness that the Ægean statuettes were executed on the spot. This material is marble; it forms the sub-soil of the islands, but is found neither in the Nile valley nor in Phœnicia. Moreover, works such as the two musicians of Keros would suffice to prove the independence of the insular sculptor (Figs. 353, 354). The man who blundered out their uncouth shape started with the firm resolve of reproducing what he saw in Nature, and he sincerely thought he had done so. Intention, at a later date, will be carried out with better effect. If rapid advance is everywhere to seek, we are sure of its having been constant. Bronze statuettes, more particularly from Argolis and Laconia, close the idol series. Although female figures are concealed by drapery, we divine a form well hung together and of normal proportions. The exposed parts of men's figures are

handled with a lively feeling for the leading features of the form. The natural breadth which the native artist gives to his torso. the roundness of the fleshy portions of arm and leg, swelled out by the muscular masses underneath, are points which he did not learn of his mediocre colleague of Syria. Some of his works are far above many a Phoenician piece, and that of a later date. These characteristics hold with the costume: the women's dress consists of a skirt trimmed with four or more bands, and is never met with in the Nile valley or in Syria. Its deceptive resemblance to the kaunakes of the Chaldwans and Persians has already been adverted to. The men wear drawers. Finally. the idol series excites our surprise by the evident effort made henceforward towards anthropomorphism. If painting and intaglios show us dæmons with animals' heads, we find nothing of the sort in statuettes, whether of marble or bronze, which no doubt represent the dii majores. Animals and fabulous monsters. which Egypt never ceased to worship, are already relegated here to the background. So, too, the most shapeless of the figurines betray the inner craving which will prompt the Hellenes of the following period to idealize the forms of man and woman, that they may find in these noble and pure images the means of translating the idea and the various aspects with which they pictured to themselves the mysterious essence of the Deity.

Next, perhaps, in date to the marble and clay idols are the stelæ of the royal cemetery at Mycenæ. If, broadly speaking, the theme depicted on them is similar to that of many an Egyptian and Assyrian bas-relief, it is vet of a nature likely to come to the mind of any artist entrusted with the task of glorifying the prince. The composition and the work itself, however, are diametrically opposed to the vast and far more complicated pictures, where Oriental art has handled the same subject. Here the number of the actors who appear in the scene is reduced to a strict minimum. Personages and animals are drawn with strange carelessness, and merely outlined, all inner details being eliminated. The groups are enclosed by those spirals and cable ornaments which characterize Mycenian art. The author of these bas-reliefs had no good models before his eyes; and he tried his best to convey, with the few resources he could command, a high notion of the warlike prowess and power of the king. His sincerity is only equalled by his clumsiness.

The same may be said of the piece representing a siege (Fig. 358). Here the work is by a silversmith, and the art, in consequence of it, is much more advanced. The fragmentary scene in question has been compared, but we think erroneously, to the apparently similar pictures displayed on the walls of pylons. whether in the tombs or palaces of Egypt and Assyria; but the resemblance goes no farther than the choice of subject. Remembering that Achæan, Perseidæ, and Atridæ dynasts, though their activity was exercised on a smaller scale, must have been warriors as doughty as the conquerors of Thebes and Nineveh, we cannot be surprised at the bellicose themes we find at Mycenæ. the rest, there is nothing either in the aspect of the fabrication or the grouping of the designs to remind us of the Nile valley or of Assyria.1 Here all is more incorrect, less symmetrical and conventional than in the assaults figured on Asiatic bas-reliefs. The movements are expressed in a lively but totally different manner. The sculptor sought his models in one or other of those conflicts which, either as a witness or actor in the scene, had stirred his soul within. Perhaps also the lays of the distant predecessors of Homer and Hesiod may have furnished this or that detail to his picture.

The complicated and clever technique, the fairly correct design of the figures represented on the encrusted daggers and on the Vaphio vases, caused even greater surprise. Hesitation was felt and doubt expressed in some quarters to the effect that the authors of the stelæ and the rude clay figures could not be the same artificers who had turned out works which bear witness to skill of no mean order. These misgivings I shared as far as the daggers are concerned; 2 but my doubts vanished in proportion as my acquaintance with the productions of Mycenian civilization increased. The native goldsmith, in all probability, learnt these fine and delicate processes which he applied to the decoration of his daggers, from craftsmen trained in the Egyptian school, for it is clear that more than one subject must have been borrowed from the Delta. The Mycenian griffin, with his three or four curled plumes falling behind his head, comes straight from the Nile valley; whilst the stretch of body of running animals is also in the habits of the Egyptian

¹ History of Art.

² Bulletin de correspondance hellénique.

draughtsman. Finally, the chasing of water-fowls is one of the commonplaces of Egyptian painting. Thus, a bas-relief shows us a beast of the feline species and an ichneumon pursuing their volatile prey among rushes. Despite these and similar affinities, I am convinced that the Mycenian productions are the outcome of an Egyptianized but not of an Egyptian art, and I should no longer be inclined to consider any of the daggers as due to Phœnician industry. We have seen far too often the lion drawn from nature in the Mycenæ intaglios and bas-reliefs not to accept the fact that at that time he still inhabited the mountain ranges of Greece. Lion-hunting, therefore, was a theme which this art may claim as its own; besides, the details of costume and ornament beheld in all these pictures, distinguish them from Phœnician works and serve to connect them with the series of Mycenian productions whose origin nobody would think of disputing. men wear the tight-fitting drawers which we find everywhere at Mycenæ, and not the loose loin-cloth seen on the figures of Phænician bowls.² Again, on many of these tazze, the warriors are protected by a round shield; whereas the cavaliers of the Mycenian glyptics and bas-reliefs are provided with two kinds of shields, neither of which has yet been met on Phœnician Both kinds of shields are huge; the one is long and semi-cylindrical, the second spherical, and curved in at the sides (Pl. XVIII. 3; Figs. 414, 416, 418).

If it is not unlikely that the subject figured on another blade was suggested by an Egyptian model (Pl. XVII. 1), I think I can detect from certain indications the mark of the artist. The way the plants, papyrus or lotus, are grouped in the field, is instinct with a degree of elegance and variety not to be found in the similar representations of Egypt, where the plants grow plentifully, or in the less frequent examples from Phænicia. The plants, when figured in the Delta, are stiff and straight (Fig. 427) or arranged into sheafs (Fig. 428). It is the same with the medallion of a Phænician bowl. The artificer who designed the decoration of our dagger was more inventive; each bunch of lotus is given a different inclination.

As to the Vaphio vases, I am afraid that I took unnecessary trouble when, two years ago, I claimed for the Mycenian chiseller the honour of having executed them. This view of the case

¹ Lepsius, Denkmäler. ² History of Art. ³ Ibid. ⁴ Ibid.

did not arise from the choice of subject, for in itself it would be insufficient to clinch the question. If the wild bull does not appear on Phœnician bronze and silver bowls, whereon are represented lion and stag-hunts, he is brought down by the arrows of the sportsman in the wall-paintings of a hypogæum

Fig. 427.—Antelope chased through a tangle of papyrus.

at Thebes; whilst he is depicted overthrowing his would-be captors in a bas-relief of unknown origin, but obviously influenced by Egypt and Chaldæa.

At any rate, the subject figured on many specimens of Mycenian glyptics, on an intaglio (Fig. 421, 24) for example, and above

Fig. 428. - Marsh from an Egyptian painting.

all on the celebrated wall-painting at Tiryns (Fig. 432), is manifestly the same as that of the Vaphio goblets. Now, if it is just possible to assume a foreign origin for the gems, we cannot do so for the painting, which was executed on the spot by workmen that must have been domiciled in the country. What is there

¹ F. CAILLIAUD, Recherches sur les arts et métiers de l'Égypte.

² L. HEUZEY, Un prototype des taureaux de Mycènes et d'Amyclèes.

so wonderful in the fact that hunting should have been a theme on which the imagination of Mycenian artists loved to exercise itself? Did not tradition count among the great and good deeds of Theseus, his having rid the inhabitants of Attica of the Marathon bull?

Some have expressed surprise that palms should be figured on one of the vases in question, in that the tree does not grow naturally in Greece. We do not suppose that the champaigns of Argos and Sparta produced edible dates at that period, any more than they now do; but why should not the palm have been cultivated as a purely ornamental plant by princes who, like Alcinous, loved to surround themselves with beautiful gardens? Besides, they had not to go far to admire its elegant outline and flexible plume of feathers swayed by the passing breeze. know that it grew at Delos when the hymn to Apollo was composed; whilst the palm-wood, which to-day is one of the pleasing features of the Sittia district, in Crete, was doubtless even then in existence. Finally, remembering that the Achæans were a nation of soldiers and adventurous mariners, whose raids often extended to the coasts of the eastern basin of the Mediterranean, where is the impossibility of their bands having landed more than once under the palms of the Delta and those of Southern Syria? Hence is explained why the palm is introduced not only as an accessory into the decorative scheme of the Vaphio goblet, but as chief ornament on the handles of mirrors (Figs. 379-381), and in the field of more than one intaglio (Figs. 419, 6, 10, 18; 421, 11; 424, 11).

Nothing characterizes an art better than the conventions which it employs; that is to say, as soon as these cease to be of the kind which arise from the inexperience of the artist, and are necessarily inherent to every nascent art. One such convention is peculiar to Mycenian art; we allude to the very singular expedient which it uses to express the ground. This, in the monuments of Oriental culture, is figured under the feet of the personages; above their heads are flights of birds intended to suggest the notion of heaven, of infinite space. At Mycenæ, however, there is no sky; and but for the figures, which must inevitably be placed in the vertical plane, the head towards the upper rim of the vase, we should have no up or down in the picture. The rocks, which are meant to indicate the broken

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nature of the ground, are popped all over the place, to make it quite plain that the figures are moving between two stony walls. It is the same with the pair of trees to which a huntingnet is fastened; they are planted opposite each other, the one near to the foot, the other close to the lip of the vase. It would be difficult to imagine aught more arbitrary than the perspective of the landscape. The spectator is supposed to look down upon the scene from a very elevated position, but the projection system does not extend to the figures. These are represented as if seen sideways, by a person standing on a plane with them. We have here a compromise between two different modes of figuration, or to speak more correctly, two modes in contradiction to each other. Is not the fact a significant one, that if we wish to find other examples of this strange combination we must fain turn to Mycenian art? Look at the dagger (Pl. XIX. 6), and several intaglios (Fig. 413, 414), and you will perceive the truth of our assertion; for in one of these the landscape is only expressed above the heads of the figures (Fig. 419, 17). If, peradventure, the testimony of both gems and daggers should be challenged, that of the painted vases must stand. These are universally held to be native productions. Now rocks are depicted on more than one vase, amidst which nautili, polypi, and other mollusks are swimming, both in the upper and lower portions of the field: "The whole scene looks like the bottom of the sea perceived from a high cliff or the deck of a ship" (Fig. 429).1

However surprised we may have been at the sight of a work as advanced in some respects as the Vaphio goblets, we must give in to the evidence. There was no other reason or rather pretext for turning to Egypt or Phœnicia as the country of their birth, except the beauty of execution, the happy composition of the double scene, the expressive vivacity of the movements, and the boldness of the design. Yet the characteristics which distinguish this art are found one by one in these vases; and the same qualities return in other monuments pertaining thereto, though perhaps not carried to so high a level. For obvious reasons, the doubts which beset us here are absent as regards the golden masks. If the idea of thus covering the face of the dead may very well have been suggested to the

¹ The observation is due to Murray, A Vase of the Mykenai Type (American Journal of Archaelogy).

Mycenians by the masks they had seen on the Egyptian mummies, the difference of execution from one country to the other is so great as to strike the most superficial observer. is a wide chasm between the noble and conventional style of the mummy masks, and the coarse realism of the Mycenæ examples. Moreover, we fail to perceive any affiliation between the animals which the Mycenian artist represented and those that were probably brought to him on imported wares. From these he no doubt borrowed certain fictitious types, such as griffins and sphinxes; but when he had to reproduce living and organic forms, he took counsel of his personal impressions. We shall not insist on those rude clay jars and figures in the semblance of dogs, cows, and pigs, which reach us from the Troad and Argolis (Fig. 383-387); nor those seen on gold leaves where the animal form, barely outlined and rigorously symmetrical, has but a decorative value (Figs. 397, 404). In turning out by the dozen those mock offerings and personal ornaments, the craftsman contented himself with rapidly sketching such images as he could best remember. Was the case different with the lions of the famous gateway, the bulls of the gold goblets, or the bestexecuted intaglios? Did he seek his models from foreign parts, Egypt for example, for those works on which he lavished his best care? The answer to this query must again be sought from the Vaphio vases, since nowhere has the artist been in such earnest as there. Now the style of the Vaphio bulls is neither Chaldæo-Assyrian nor Phœnician, so that we have no reason whatever for approximating it with the inexpressibly rude productions of Syro-Cappadocian art.

The sculptures and paintings of Egypt show us a much more simplified animal form. The contour is reduced to such strokes as characterize the species, and the chisel and brush are sparingly used within the contour; being confined to those indications the elimination of which would make it difficult to understand the anatomical frame-work of the figure. This looks as if standing at a great distance. In the plastic art the taste of the artist led him to act as distance does in the outside world; namely to eliminate all superfluous detail, by which the eye might be amused but not helped in defining the unit. He thus epitomized and simplified nature. Here the case is quite different; the form seems to have been looked at at closer quarters, near enough for every

shade of the outlines to have been made out. This is why the form is fuller than that beheld in the plastic works of the Delta; at the same time, the muscles, bones, and articulations, the wrinkles and wisps of hair are less harshly expressed, less rigid than in the Chaldæo-Assyrian bas-reliefs. The forms may be said to stand mid-way between the two modes of realistic interpretations which characterize the sculptors of the Euphrates valley and those of the Delta. It belongs to neither of them; nor is it a compromise between the two, one of those eclectic combinations which the Phœnician artisan knew how to turn to his profit. The style is distinct and original. I cannot understand how anybody could look towards Syria for the author of the Vaphio vases. In that case we should have to suppose that an art existed there in remote times whose works had all perished except the goblets in question. The contrast between our vases and Syrian productions must be patent to all. The Phœnician specimens, which, owing to the material and destination, would best lend themselves to be compared, are those bronze and silver gilt bowls which that art has handed down to us in considerable numbers. The themes it treats offer many points of resemblance to those which served to decorate our goblets. Yet how different the taste and spirit which they disclose! The scenes figured on the Phœnician bowls have somewhat the air of having been traced on a pattern; we divine the "blocks," to use a modern expression, which the workman had borrowed from models of many lands and distributed liberally, in those concentric bands surrounding a central design.1 His tool was agile and sure, but his work was second-hand: he hurried on to secure his fee, and had no time to inspire himself with the direct spectacle of Nature.

Here it is quite another matter. Despite faulty design, of which the Phœnician craftsman is free, we feel ourselves in presence of the work of an artist who was an eye-witness of the scene which he represents, or who pictured it vividly to himself from what he knew of the habits and gait of the bull. Although inexperienced in many respects, he had observed Nature with intelligent curiosity, and the infinite variety which he perceived there had so far impressed him, that he was at pains to reproduce its ever-changing and diverse aspects. Out of the seven bulls

that people the wood, no two have the same pose. On the contrary, look at hundreds of pictures in the Egyptian necropoles, wherein the bovine species is portrayed, and you will scarcely find more than three or four different attitudes given to the animals. They are either being driven along in droves, or drawing the plough, or couchant, or being milked. The sculptor never seems to have stepped outside this narrow circle. same poverty of invention is manifest on the Phœnician tazze. where no change is rung from first to last. The ox is either feeding or attacked by a lion, and the cow invariably suckles her calf. The only subject which stands out from these unending repetitions, is a patera from Curium (Cyprus), on which are figured two bulls in no very impressive manner. By themselves our vases already offer, as far as the bulls are concerned, a richer repertory of forms and characteristic movements than all the Oriental art put together. The superiority of the Mycenian artist will stand out far more clearly if we throw in the Tirynthian fresco, and above all the engraved gems, where this same type appears so often and in such varying forms (Figs. 419, 7, 8, 18, 24; 421, 4, 24: 424, 11: Pl. XIII.).

Though the interpretation of man's body on our vases and other monuments of this art is far below the portrayal of the animal, it is no less individual. The form of the three personages introduced by the craftsman into the twin pictures has undergone notable changes. The drawing of the head is correct enough, and not deficient in vigour; but the torso is unnaturally thin and slender, and the curving in above the hips much too exaggerated. We find nothing of the sort in Egypt, where a just proportion is observed between the breadth of the chest. the fulness of the abdomen, and the roundness of the limbs. These are attached to the bust with scarcely any transition or salience about the hips. Frank nudity is rarely represented in Chaldaea or Assyria; but when we exceptionally meet with it, we always find that the various parts of the unit are well poised. The portrayal of the nude figures on Phœnician cups is clearly reminiscent of the general lines of Egyptian figures; whereas we have, so to speak, no example in Mycenian art where the exaggerated curving in of the torso does not occur. This curious deformation returns in the scene where the hunter chases a bull,

as well as in the Tirynthian fresco, and on many a glyptic piece (Pl. XVI. 5; Figs. 419, 5, 12, 15, 21; 421, 1, 7, 23; 424, 1, 3, 9; 425, 2, 4). It is as the personal mark, the signature of the artist.

The same remark applies to the character of the costume and head-gear. The leading peculiarities of the dress, whether of man or woman, have already been pointed out; but there remain details which deserve to be noticed. In Egypt, men and women are always bare-footed. But the personages depicted on the Vaphio vases wear shoes with slightly turned-up tips, fastened above the ankle with strings which go round the leg four or five No shoes are visible on the gems, because of the small dimension of these; but they are plainly indicated in the hunting scene at Tiryns (Fig. 432). The shoes are expressed by a dark brown tone, evanescent bits of which are traceable on one foot. but we know how far they reached by the presence of the dark leather strings. In many parts of the Grecian world very similar shoes, with pointed and turned-up ends, have not long gone out of fashion; under the name of tsaroukhi they are still worn in Albania.1

Nor should the long flowing hair of the figures be left without a word of mention: it sweeps the earth and is tumbled about on the two men overthrown by a bull (Fig. 362); whilst the cattledriver has his fastened by a knot on the nape of the neck, whence it floats in large masses about the shoulders (Fig. 363). In the like fashion does the gem-engraver arrange the hair of his personages in those rare instances where he has contrived to insert the head-dress into the narrow field (Fig. 421, 1). The epithet which Homer frequently uses in reference to the Achæans, by way of explanatory note as it were, shows that the heroes wore theirs in some such fashion.2 From the Achæans the mode passed to the Ionians, and we have evidence in the archaic statues that the fashion died hard in Greece. is nothing of the sort in Egypt; where men shaved their heads and wore a thick bushy wig. Subordinate features, such as the costume and head-gear, are not the only items that help us to recognize in these personages the direct ancestors of the Greeks of history, and not, as some have advanced, aliens, Africans, or

¹ See the examples which Tsoundas has collected (Έφημερίς, 1889).

² Κάρη κομόωντες 'Αχαιοί. HELBIG, Das homerische Epos.

Asiatics, whose image and warlike deeds had been skilfully depicted by Oriental artists, for the amusement of the Achæan princes of Peloponnesus. If we look at the contour of the figure, where this is large enough to allow us to follow the line of the profile of the face, we shall see the happy proportions of the head, the fine open eye, the beautiful curve of the mouth, and above all, the straight nose which continues the frontal line without a break, whether on gold and silver vases or ivory plates. These are the leading lines of what is called the Grecian type, that which the masters of the classic age will reproduce by and by (Figs. 359, 362, 363, 366, 373, 374).

It has often been averred that there is an exotic air about the bas-relief of the Lions Gate. This may well be, but if so, the theme did not come from Egypt, where the ornamentist, when he opposes two figures, symmetrically arranged, likes rather to put them back to back than face to face.1 It is self-evident, however, that the lions, as well as many images engraved on our gems, recall the group of two fronting each other on countless Chaldæo-Assyrian cylinders. But nobody has yet come across an example in Oriental art where the palace is epitomized by the façade of the principal gateway, this is made up of an altar, columns, and an entablature, including two lions, who represent the guardians of the royal dwelling. Even allowing that the Mycenian sculptor did in fact borrow the group, when he received it, it was but an empty form, a commonplace subject, to which he added certain characteristic features, and put into it a meaning which it has nowhere else. Accordingly, he may claim to be the inventor of the symbol. For reasons of size, the features of the face cannot be seen on the images of the engraved stones; but the leading lines of these bear the stamp of the same tastes as the other sculptured monuments, and are quite distinct from Egyptian and Asiatic glyptics. Thus, the stones which the craftsman likes to engrave have not often been seen elsewhere; whilst the shapes are neither borrowed from Egyptian scarabs, nor from the cylinders of Anteria Asia, although these penetrated in Cyprus, and were imitated there.2 Some few scarabs have been found in the graves at Ialysos and Mycenæ, and a cylinder reaches us from Vaphio.8

To sum up. Whether we turn to the engraved stones or other

¹ History of Art.

² Ibid.

³ 'Εφημερίς, 1888.

works of the Mycenian artist, we everywhere see the same choice of subjects, the same weapons and costume, the same mode of interpretation, and the same conventions; sculptor and engraver work on the same themes, and the spirit in which they treat them is thoroughly alike, but widely different from that of Oriental art. The reader will judge from the example engraved below, perhaps the most impressive in our collection, how profound is the difference between the two styles. The intaglio represents a battlescene carried on by four men (Fig. 414). Victory seems assured to the man with the raised sword; but the arrival of a new-comer may yet deprive him of his triumph, and in this way the issue of the strife is left undecided. We have met nothing like this in the battle-pictures of Egypt and Assyria. There, the artist does not admit that the hero whose exploits he is about to represent can ever be vanquished, or victory tremble in the balance between him and his foes. These are always overthrown by his mighty arm, or crushed under the wheel of his chariot. Any work of art where the conclusion may be foretold with absolute certainty must inevitably lose of its interest and warmth. unerring instinct saved the Mycenian artist even then from such a pit-fall; he understood that the mind of the spectator would not be moved if the end of the conflict were known beforehand. Here then, as in the lion-hunt of one of the daggers (Pl. XVIII. 3), as in the bull-fight of the Vaphio goblet (Fig. 362), he remains neuter between the parties striving against each other. His interest in them waxes in proportion to the power which they put forth; he takes as much pleasure in showing off the courage of the lion and the bull, who fight gallantly for dear life, as in the man who brings them down with his club, or nets them. These are the very methods that Greek statuary will employ. If there is an intaglio which more than any other may be said to betray Oriental influence, it is the Mycenæ ring with the portrayal of a deity seated in front of a tree (Fig. 418). Obviously it bears a certain analogy to the worship scenes figured on many a Chaldæo-Assyrian cylinder; these present several variants on a theme representing women in different attitudes, grouped around a palm usually loaded with fruit; whilst the sun and moon appear in the upper part of the scene. Hence it

¹ M. Heuzey has pointed out the analogies referred to above, and engraved one of the cylinders in question (*Revue archéologique*).

is not at all unlikely that an Oriental intaglio suggested the idea of the general arrangement, as well as of this or that minor detail; but the gem, nevertheless, was engraved by a native artist, who put features there which he had not found in his model, granted that there was a model. Such would be the small personage with a spherical shield curved in at the sides, who hovers in mid-air; or the women's skirt, which, on the cylinders, never assumes the crescent-like shape above the ankle beheld on the figures of the Mycenæ gems. If the engraver derived his inspiration from a foreign subject, he translated it into his own idiom.

The conclusion, no matter the side we approach the subject, is invariably the same. Mycenian sculpture, like architecture, is an autonomous and original art; it may have demanded of older civilizations the primeval idea of certain forms and the secret of certain processes, but it has already many affinities with the art of historic Greece, and is allied thereto by closer ties than to any branch of Oriental art. The sequence and successive phases through which this primitive art passed during its evolution, from the shapeless simulacra picked up in the lower strata at Troy to the elegant and complicated works executed on the eve of the Dorian invasion, remain obscure. All we can hope to do is to fix some leading marks which will enable us to roughly estimate the duration of that long evolution, and divide it into a certain number of periods, according to the distinctive characteristics of each.

Of the first and second settlement at Troy, it can scarcely be said that sculpture, even in its embryo state, existed there, for the essayals of a hand trying to imitate types of the organic world are exceedingly rare. The tribes of the Cyclades, whose existence is marked by the oldest cemeteries that have been found in some of the islands, stole a march on those of the Troad. If the rendering of the living form, as we find it in their marble idols, leaves much to be desired, the essential elements are all there, a first success due, perhaps, to the ease with which marble can be worked. We know from more than one example how far the progress of art and industry among various peoples has been influenced by the employment of a fresh material. Out of a rock, docile to the tool, the inhabitants fashioned vases for domestic and ornamental uses, along with effigies of their gods, who perhaps even then bore some of the names which now cannot be spoken

without calling up to the mind a whole series of noble and charming images.

Even without the treasures which the soil of Mycenæ has yielded, a glance at the walls and buildings attributed to the Cyclopes would have sufficed to make us realize how vast was the difference between the island hamlets and the agglomerations formed around the powerful citadels of continental Greece. Nevertheless, from the graves representing the oldest Mycenæ which we can ever hope to reach, no figures in the round, no stone statuettes, have been brought out except clay idols, and these are scarcely superior to the marble idols of the Cyclades. As to the amazing rudeness of the sculpture seen on the stelæ which were set up above these sepultures, it is to be explained by the stubbornness of the material the artist had to his hand; this, unlike the fine white marble of the islands, did not temptingly meet him half-way. There is yet another reason why stone sculpture should have made such slow progress in Argolis, namely, the wealth of this community, the enormous part played by the precious metals, and consequently the pre-eminence of the metal-worker or goldsmith, the privileged servant of prince and noble, over every other craftsman. The metal-worker transforms the gold which trade, the chances of war, or piracy bring in abundance to the tribal chieftains, into all manner of personal ornaments, vases for the table, and weapons cunningly wrought. Gold is the principal factor of that culture; we might almost say, in forcing somewhat the present meaning of the word, that the gold standard was the only standard known to the Mycenian community. The astonishing proficiency of the metal-worker can only be accounted for by the enormous quantity of gold which that society possessed, and the use it made of it.1 The Trojan goldsmith was considerably more advanced than the sculptor and the potter. We have evidences that in the Cyclades he mainly worked in silver, and gained some skill in his craft; but his decisive progress was made at Mycenæ, where kings placed ingots without number at his disposal. Metal technique has resources which are unknown to wood and stone. lends itself to be fused and cast; beaten out flat or in relief with the hammer, stamped in a mould, engraved with the point, rounded into balls, lengthened into thin leaves, pulled into fine threads or

¹ This is well understood by Tsoundas, Μυκῆναι.

wire, and cut into flexible narrow strips to form every conceivable curvilinear ornament. With light, nimble fingers, the pieces thus obtained are easily joined together by soldering or riveting; this can be so deftly done as to be almost invisible to the eye.

These resources one by one are only learnt by constant practice; and it would be difficult to over-estimate how favourably placed was the Mycenian craftsman in this particular. opportunities of the stone-cutter were confined to carving figures in the field of a stela or decorating the gate of an acropolis; but such works were necessarily few and far between, whereas the flow of commissions that came to the goldsmith never ceased. The tastes and magnificence of the master spurred him on to produce unremittingly, and put forth all his strength to please his employers, who would not be satisfied with the same everlasting subjects. There is no handicraft which requires longer training than this, none where a turn of the hand is of greater consequence. Hence we are led to infer that the abundance of gold in kingly castles gave rise to real guilds in the main centres. The more delicate processes, such as incrustations on metal, were perhaps learnt in the first instance of alien artisans, who had come to Argolis to improve their lot, or had been brought thither as slaves. But once the secrets and processes of the craft had been mastered, they were handed down from father to son in artisan families, each generation adding somewhat to the stock it had received. As the artisan gained more and more skill in the handling of his tools, his confidence in himself increased, and his style became That he had started with geometrical drawing is shown from the fact that linear patterns are about the only ones we see on the monuments of the Cyclades; the next step was to demand new forms of the sea fauna and flora, which the ceramist took up and continued with great zest. So too the elegant outlines of certain insects seem to have had great attractions for him; by degrees he plucked heart of grace and introduced first the figure of superior animals, then that of man himself, into works of a better class. The silver vase representing a besieged city, daggers with hunting scenes, and not a few engraved signetrings, were all brought out of the shaft-graves over which rose stelæ with the royal chariot carved upon them. Rings, vases, and daggers, then, cannot be younger than the stelæ, yet how wide the difference of execution from one group of monuments

to the other! The following detail will suffice to establish the superiority of the metal-worker. We have all read in Homer of the war-chariot drawn by a team of two horses; but only one is figured on the stelæ, the other is to be understood. On the contrary, in the narrow field of the bezel of a ring, the goldsmith has succeeded in putting behind the first horse the head and croup of the second (Fig. 413).

In that period the influence of the metal-worker is felt everywhere. The ornaments filling the space not occupied by the image are taken from gold, silver, and bronze pieces. If in the second period in the life of the Mycenians the lions that watch over the citadel gate were endowed with a just proportion and a certain nobility of aspect, it is because the stone-carver had learnt his lesson of the goldsmith. Yet this was the same type which he had so imperfectly rendered in the least awkward of the sepulchral reliefs. Where should he have learnt how to improve his lion figures, except from those which the engraver introduced into his vases, daggers, and gems? To the goldsmith also must be ascribed those rare bronze statuettes that make their appearance towards the close of the Mycenian period.1 The artisans who supplied the princes with those show weapons and artistic objects which filled their treasuries employed this or that metal according to circumstances, sometimes introducing them all into one piece. Do not we see Homer calling Laerkes-whom Nestor summons to Pylos, that he may gild the horns of his oxen - γαλκεύς (bronze-worker) and γρυσοχόος (gold-smelter) indifferently?2 A gem-engraver is after all no more than a metal-worker, or at most his disciple and continuator; if we allow, as seems probable, that the taste for chiselled gems became general, it follows that glyptic art developed into a separate craft, and turned out seals and personal ornaments without number. Engraving in metal led the way to intaglio work.

The best representative, then, of this archaic culture is the craftsman who modelled the Vaphio goblets and certain gems; he is the precursor of that grand art of sculpture in which Greece will excel. An intaglio from Vaphio, representing a bull attacked

¹ To the few bronze statuettes which we have reproduced (Figs. 345, 349, 350, 351, 388) I have only to add a small goat of the same metal that comes from a grave at Ialysos (*Mykenische Vasen*).

² Odyssey.

by a lion (Pl. XVI. 12), strikes me as even superior to the great vases near which it was found. The design is as impressive and varied as that of the vases, but more correct. Despite the small dimensions of the image, the limbs of the bull are modelled quite as cleverly as the best the goblets have to show. The rendering is somewhat dry and sinuous, and in strong contrast with the amplitude of the powerful flanks swelled out by agony. Fleshy though the sides may be, they allow us to see under the skin the ribs stretched by the effort which the animal makes to breathe, whilst the teeth of his adversary tear his back, and his claws threaten to strangle him. The convulsive movement of the head as it falls between the rigid paws, is copied from Nature herself; he lowers it that he may avoid the deadly embrace of his terrible foe, from whom he vainly tries by a violent and desperate jerk to free himself. Of the lion we see but the top of the back; yet we divine right well the spring which has landed him on his prey, and the voracity with which he satisfies his appetite on that back, which sinks under his weight. I very much doubt whether Grecian glyptic art in its palmiest days will turn out figures more living and realistic than these. Two more lions (Pl. XVI. 6, 14) and a pair of bulls (Pl. XVI. 2, 17) claim our attention for qualities of the same high order. Here, too, the design is at once fine and singularly broad.

Having passed in review the march pursued by this art in its development, we are now in a position to pass a wellpondered judgment on the merits and demerits of this sculpture, such as we find it in the last days of the Mycenian period, when we see it in its perfection in the works of continental Greece, notably Peloponnesus. The result of our study is to the effect that the sculptor, even when he became most skilful, never advanced far enough to be able to thoroughly cope with the human figure. If in chiselling the sepulchral masks he honestly strove to express the shades of meaning which make up individual character, he yet failed in some respect whenever he attempted to represent the nude, the whole frame-work of the human figure. The proportion which he adopted between the different parts of the body is not correct at all points. attachment of limb and trunk leaves much to be desired; the limbs are too long and slender; his most glaring fault, however,

is the exaggerated narrowing of the bust above the hips. Nevertheless, this very mistake shows that although his eye had seen more than there was in reality, he had observed Nature with intelligent curiosity.

Like all beginners, he achieved his greatest success when he copied animals, but he was less fortunate in his presentation of man. Some of his bulls and lions, notably those which he gathered together, as it were, so as to insert them in the narrow space of a seal, hold their own against all comers. He had rather a fine intuition of the whole than a precise knowledge of detail. His portrayal of animal and human figures, despite blemishes of drawing, strike us particularly because of the dash and warmth, the sincere feeling, which he has put there. Our sculptor stands out from among all his colleagues for his taste, we might almost say his passion, for movement and variety. The bolder and franker the movement, the more unforeseen it is, the more the artist, without measuring the difficulties of the emprise, seems actually to delight and revel in attempting it. In this respect then, despite inexperience, he is the distant precursor of the great sculptors of the fifth and fourth centuries B.C. We shall have to descend very low in the series of monuments of archaic art ere we alight on specimens comparable to the best works of Mycenian sculpture, or where the free action of the body in activity is reflected and portrayed with better effect.

CHAPTER X.

PAINTING.

WE have defined the part which colours, laid on with the brush on the woodwork, especially on coatings of plaster, played in the decoration of edifices.1 In order to illustrate our words, we have printed several specimens with purely ornamental designs, composed of straight and curvilinear lines combined in various ways, which served to enliven and heighten the aspect of the floors, walls, and perhaps the ceilings, if not of all the apartments, at least of the principal ones (Figs. 85, 206, 210-216, 229, 242; Pl. XIII. 2, 3). We have shown that the painter, at the early date when Thera was buried under volcanic ashes, began to be dissatisfied with geometric design alone, and looked for and found variety in leafage and flowers (Figs. 208, 209, 236), as also in certain inferior animals, such as cephalopods, the circular forms and flexible tentacles of which happily combined with those spirals dear to the Mycenian ornamentist (Fig. 237). We also hinted at the bolder flights of the painter; his earnest efforts to clothe the walls of his reception-rooms with veritable pictures made up of great quadrupeds, including men and gods. If we have engraved rather early in this volume the fresco fragment representing fully equipped warriors alongside of their horses (Fig. 238), it was with a view of enabling the reader to form some idea of the inner aspect of the palace. So scanty a piece of information, however, cannot dispense us from devoting a special study to whatever remains of these pictures, where the painter has emulated the sculptor, and like him attacked the noblest and most complex types of the living form.

The remains of mural paintings have all been found at Tiryns and Mycenæ, and external evidence leads us to infer that they all belong to the close of the Mycenian period. The Mycenæ hearth discloses as many as five different coatings of coloured stucco (Fig. 239), thus showing how often the painting had to be renewed to make good the damage caused by the smoke beaten back by the wind into a room void of chimney.1 There existed at Tiryns and Mycenæ older, and perhaps simpler, frescoes than these; but whether they have been destroyed with the buildings they once adorned — whose materials have been re-used — or whether they have disappeared under more facings of stucco, the fact remains that no trace of them has come to light. Those fresco scraps which have miraculously escaped the universal destruction which befell ancient painting must represent the last state of the edifices of either acropolis. They were preserved from the influence of the weather by the covering of débris which was suffered to remain undisturbed after the fall of the Achæan dynasties.

As in the stelæ and engraved gems, here also scenes of battle and of the chase seem to have had the lion's share. the Mycenæ megaron have come numerous stucco fragments, but much damaged by the action of the fire. They appear to have formed a great picture, representing perhaps a chariot-race or a pageant (Figs. 238, 430). With the exception of a single piece which perhaps fronted the procession, all the figures move in the same direction, from right to left. Unfortunately, the bestpreserved fragments, with remaining bits of colour, only contain the lower portion of animal and human figures. The men would seem to be without shoes; hence the strings that surround the calf of the leg may have served to fasten sandals which left the upper side of the foot exposed. Two fragments make up, one the head (Fig. 238), and the other the torso of a warrior (Fig. 430). Traces of plumes falling on the back of the neck imply a low helmet, of which we have not even the outline. The pointed beard which falls below the chin, has been met again and again in other monuments (Figs. 374, 375). arms are bare, and the wrists encircled by a pair of bracelets. The body is covered by a tunic, with sleeves a few inches long. From a slight difference of tone we are led to infer the presence of a cuirass or justaucorps, which was worn over the dress. All the warriors carry long spears. As far as these faded relics will enable us to judge, the artist had figured around the public room the companions-in-arms of the chieftain, those he was wont to have about him, to share both in the convivialities of the banquet and the deliberations of political import.

A fragment from the neighbourhood of a house close to the south wall of the acropolis may not unlikely have belonged to a hunting-scene (Fig. 90, E). It represents three monsters carrying a long pole on their shoulders, which they steady with the

Fig. 430.—Fragment of mural painting.

right hand (Fig. 431). The extremities of the pole are not indicated; but depending therefrom we divine heads of large game, lions, wild bulls, or stags. Our conjecture is corroborated by the authority of many gems (Figs. 421, 8; 425, 15). As in the similar portrayals seen on engraved stones, to a man's bust and arms the painter has added the head and long ears of an ass. The mane, apparently divided into plaits, falls on the back, and a band is about the waist. The head is whole; and on the top will be noticed a tight curl or ring, which, it will be remembered, forms the distinctive feature of the Mycenian griffin. The lower part of the body is entirely obliterated; we cannot, therefore, even hazard a guess as to the species of

¹ Milchofer has given many other examples of figures of the same nature taken from intaglios (Anfange).

animal from which the painter borrowed the lower limbs of his composite type. The similar images engraved on glyptics represent a monster, now with a bird's feet, now with the paws of a lion. But whether lion, wolf, or horse-headed, these fiends are no other than the ancestors of the satyrs and centaurs of Greek poetry.

Like these they were fabled to share the thick tangle of forests with wild beasts, which they loved to capture, and whose spoils they carried into their caves. If the attribution of a hunting-

FIG. 431.—Fragment of mural painting. Actual size.

scene is purely conjectural as regards the fragments in question, no such doubt exists about the famous fresco which Schliemann discovered in the Tirynthian palace (Fig. 432). The picture was enframed by a band, with red lines led across from side to side. Below the band, a mighty bull, painted yellow on a bluish background, is madly galloping to the left. The modelling of the body and tufts of hair is rendered by red strokes and patches of the same colour, laid on with the brush. The head is short, the eye large, round, and truculent; it carries a pair

¹ SCHLIEMANN, Tiryns.

of long horns, curved in front, and reaching as far as the frame of the picture. A man balances himself on his back, just touching the animal with his right knee and the tip of his toe, whilst he throws the other high up into the air, and holds on to the bull's horn with his right hand; the other is laid in front of his body.

When the find was first brought out of the ruins, the man was explained to be an acrobat who shows off his agility by leaping on to the back of the animal in full career. A passage in Homer was cited in reference to it, where a clever rider is described who leads four horses at full speed, and vaults now on the back of one, now on that of another, without ever falling to the ground.1 Others have compared our group with the engraving seen on a Greek coin from Catania, in Sicily, and have proposed to see in the Tirynthian bull a river-god, accompanied, as on the coins, by a genii of the Satyr or Silenus family. The discovery of the Vaphio vases has given us the right, and at the same time a much simpler explanation. The bull figured on the fresco has been recognized as the animal in a semi-wild state which bold sportsmen loved to capture; whilst the tightfitting drawers secured by a girdle, and the horizontal bands covering the legs of the "acrobat" have been identified with those of the hunter who brings him down at Vaphio. the inference that the theme was treated about the same time by the goldsmith, the painter, and the engraver, who made it quite the fashion (Figs. 419, 24; 425, 12). We now find no difficulty in grasping the real character and the movement which the painter has given to the hunter. The Mycenian artist frequently betrays his embarrassment how to show two figures at once in one plane, which in reality would cover each other. In such cases he does not hesitate to superimpose vertically, bodies which in his model are horizontally juxtaposed.2 in the mind of the contemporary spectator, the hunter is running in front of the bull. Confirmed habit predisposed him to accept without demur this childish convention.

Besides mural paintings, which served to cover the walls of the apartments with a brilliant and historic veil, there were also what we should call easel or movable pictures. In a room of the house at Mycenæ near which was found the fresco with

¹ Iliad. ² F. MARX, Der Stier von Tiryns.

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the three ass-headed monsters, was also picked up a tablet of agglomerated chalk, about two centimetres thick (Fig. 433), which had never been let into a wall. We infer its having been placed on some conspicuous place or projection of the wall, from the fact that the edge is adorned throughout by a pattern of alternating red and white stripes. The external face is enclosed by a double border, within which there are traces of three figures painted yellow on a blue ground. The painting is shockingly mutilated; yet enough remains to make us realize the interest which attaches to the subject. The arrangement of the image was symmetrical. In the centre we divine an idol similar to that of a Mycenæ gold ring (Fig. 418). The figure is recognizable from the huge spherical shield, curved in at the sides, which entirely covers the body. The feet are not visible, and the head is indicated by evanescent vestiges. Left of the place once occupied by the figure are streamers: hair floating in the wind, or the long plumes of a helmet. One of the arms is stretched westwards, and may have held a spear. To the right is an altar, and behind it a woman, and, judging from several bits of colour, we may assume that the design was repeated on the left. The shape of the altar is known to us from other monuments (Pl. XIV.; tail-piece, Chap. VI.; Fig. 367; Pl. XVI. 11, 20; Fig. 421, 17). The woman stands upright, both hands raised above the altar. The upper part of the body is covered by a close-fitting garment, whilst sweeping down from the waist is an ample skirt trimmed with several tucks, which detach themselves black from the yellow ground. We have here proof positive that figures thus accoutred are nowhere to be supposed as having their bosom exposed, no matter how prominent the breasts may To the left is a second woman in the same attitude, before another altar. The only remaining portions are the bust and the head, bound with a fillet or diadem. The face and neck are painted in white. The black selvage around the neck of the yellow bodice shows exactly how far the dress extended.

Although, on account of the poor state of the fragment, many details escape us, the general drift of the picture cannot be mistaken. The scene depicted here is analogous to that of many intaglios (Figs. 418; 421, 23; 422). The two women are offering their homage, mayhap a sacrifice, to an armed-god, Ares or a primitive Zeus. The picture, being a movable one, has been

considered by some in the light of an importation, but we think on very insufficient reasons. The same blue ground, the same colour and technique, and even accessories, occur on the wall-paintings at Tiryns; whilst the god with the huge shield, the beflounced women, and the profiles of the altar have been met again and again on other monuments of Mycenian art. The picture was doubtless intended to recall some religious ceremony of the local worship, and painted by the same artists who decorated the megarons. It was probably set up in a prominent place about the room, and designed to place the owners of the house wherein it was discovered under the protection of the god of battles.

With these populations, the brush was not only employed to decorate the walls of buildings, but of every available expanse of surface. With it thousands of clay vases were covered with designs, including those stone vases which the isles of the Archipelago turned out in vast quantities. Of these, not a few specimens have found their way to Argolis. Thus, on the fragment of a sandstone jar from the Heræum, the point of the brush has traced the outlines of a man with a necklace (Fig. 434). The dress is only indicated by a broad band which must have formed the upper border of the tunic.

Of all these paintings, the Tirynthian fresco is that which, owing to its state of preservation and the nature of the theme, permits us to judge of the habits of the painter and his qualities of workmanship. As to the figures and patterns having been produced from other designs, this is an idea which, as has been well observed, is inadmissible. The eye of the painter was his only guide; he drew the image on the wall itself, even though he had to trace and correct his outlines more than once. The ground of the frescoes has peeled off in many places, and revealed the remains of an older sketch over which a coating of blue had been spread. The bull in the first instance was somewhat longer, and as a consequence of it the tail stood farther back and the fore-feet were higher than they are now; but the artist saw his mistake, and outlined the figure three times over until he was satisfied. The fact that the painter drew his outlines upon a damp surface implies a singularly free and sure hand, together with a precise knowledge of the appropriate character to be given to each form

¹ Athenische Mittheilungen.

F16, 433.-Coloured plaster. Actual size.

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which he introduced into his pictures. These are points that long practice alone would secure to him. As to his qualities and shortcomings, they are those of the sculptor. What fascinated him most was movement of the liveliest, aye, of the most violent description. The attitude of the bull is seized with great justness, but that of the hunter is not so happily rendered. In both instances, the ruling idea of the artist was to show how the body elongates and the limbs stretch as if moved by springs, when the animal is at full speed. His fault is to have over-

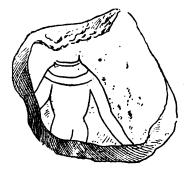


Fig. 434.—Painting on fragment of sandstone jar. Actual size.

stepped the mark; the figure stoops too much forward, and one of the legs is unduly raised in the air; whilst the runner looks as if he must fall to the ground head-foremost. As on the Vaphio vases, here too the animal is better drawn than the man. But the drawing of the bull itself is by no means faultless, the head being too small for the deep chest and ample sides. Despite these blemishes, the group reflects honour on its author. His technique is more expeditious and less concerned with detail than that of the worker in metal; but like him he is thoroughly in earnest, and has a genuine feeling for life.



CHAPTER XI.

INDUSTRIAL ARTS.

Pottery.

Among the bequests which primitive communities have left us, the largest place must be given to objects depending upon what we have called industrial arts. Some societies, those that succeeded each other in and around the citadel of Troy for example, reveal themselves to us by monuments of this class alone. In the collection of objects that reach us from the oldest strata of the mound at Hissarlik, there is scarcely one which has anything to say to art pure and simple, e.g. that which is not content to administer to the most pressing wants of man, but impresses on the material it employs forms each one of which is the outward expression of thought or of a particular feeling. main, nay, almost the sole interest which so rudimentary a plastic art offers to the historian, resides in the fact that it informs him of the beginnings and earliest progress of indispensable industries. It is not in the nature of art to attain to any degree of power and variety, except in regions where practical knowledge is sufficiently advanced, and the material to hand of a kind which may be easily worked. Too great an effort in this direction is sure to paralyze its inspiration. Art is prefaced by the handicrafts; it can only unfold and grow where technique and all it implies are already widely diffused.

We cannot, therefore, totally ignore productions that are the offspring of manual labour. On the other hand, we do not propose to dwell so long on this study as when Egypt, Chaldæa, and Assyria were in question. Wherever the manifold activity

of the painter and sculptor multiplies without pause works in which the interpretation of the living, especially the human form, is manifestly original, the artisan never fails to imitate the artist. He adapts and reproduces the interpretation and types of the latter in his most carefully wrought pieces. We find, therefore, everywhere a reduced image, the small change, so to speak, of the creations of the nobler art; be it in the furniture, pottery, or ornament. It even frequently happens that objects of current fabrication are almost the only information which help us to judge of this or that national tendency. This, owing to the chances of the excavations, is now scantily represented in the monuments of the higher plastic art.

Thus it comes to pass that mutilated or nearly lost series can be completed or restored from ornaments which the tool of a craftsman distributed on the handle of a spoon and the hilt of a weapon, or from the decoration which his brush has laid on the walls of a light bowl of clay. The case is different here, where the treatment of the noblest organic types did not assume much importance until the end of the period about which we are busy. Just at the moment when the effect of that progress would have re-acted on industry in all its fullness, invasion and conquest scattered the artisans upon whom this influence would have been exercised to the four winds of heaven. On the other hand, the crafts could not benefit from art in those centuries during which the tribes that occupied the western coasts of Asia Minor and the isles of the Ægean carried on their obscure existence and activity, for the simple reason that art was as yet unrevealed. Hence when the artisan, in obedience to the instinct which awakes in man even before he has emerged from barbarism, strove to adorn his handiwork, all he could do by way of ornamentation was to form patterns based on a combination of lines, or, following the example of Nature, to imitate very simple organic forms. The number of such combinations is very small, for the lower forms of the physical world lend themselves to but few movements. The result of this is, that for the greatest part of the initial age of which we are endeavouring to present a general view, the decoration on industrial productions has an appearance of richness which is all on the surface. Even where it shows itself most ambitious, it can easily be reduced, through analysis, to an exceedingly small number of elements that never

vary. The working out of these involves the least possible variety; so that the ornamentist falls into unending repetitions, which the slight changes introduced from one piece to another, bearing solely on detail and arrangement, do little to improve. It would be sheer loss of time to stop on the way in order to point out the varieties on any one design. We will confine ourselves to defining the principle of this decoration, showing, by a few well-chosen examples, how it was applied to the different materials which this industry employed to satisfy the demands of societies that, as they became richer and more settled in their habits, called forth greater proficiency and ingeniousness on the part of the craftsman.

The pottery of the primitive period is represented, in the museums of Europe, by thousands of vases and countless fragments. This earthenware, which until lately was passed over by archæologists with scarcely a word of mention, has now been submitted to minute study, and the most interesting types have been reproduced in works specially devoted to this branch of inquiry. Thus, Schliemann in his Ilios, published hundreds of vases which he had dug up at Troy; whilst in the plates of MM. Fouqué and A. Dumont will be found nearly all the pieces that have come from Thera.1 Again, the collections of MM. Furtwängler and Loeschke represent the works one by one of a more advanced stage of industry, which have been discovered up to 1886. These several publications supply us with a real treasury of Mycenian ceramics, in the sense formerly attached to the word.2

This is not the place to enter into any detailed account of the subject; antiquities of this class have been exhumed in such prodigious quantities since the publication of the Mykenische Vasen, that, were they printed, they would swell out that learned catalogue to double its present size. Accordingly, we shall content ourselves with pointing out the march followed by the art of the potter in its development around the Ægean, placing before the reader some typical specimens, in order that he may judge of the forms which it created and the successive modes of decoration which it adopted, between the distant age when the dweller of

¹ A. DUMONT and J. CHAPLAIN, Les céramiques de la Grèce propre.

² A. FURTWÄNGLER and J. LOESCHKE, Mykenische Thongefässe. Mykenische Vasen.

these lands set himself for the first time to model an earthen pot, and the epoch nearing historic days, towards the end of the Mycenian culture, when ornate pottery was manufactured.

Considered as a whole, primitive pottery may be classed under three heads. The first comprises monochrome earthenware, which again subdivides itself into two sections: vases which retain the natural tone of the clay, and vases made black by a peculiar mode of baking. The paste of this pottery is often very impure, mixed with shells and crystals of quartz; the external surface, however, is smoothed over with the polisher (Fig. 435). The use of the lathe was already known in that period, for it has served to fashion most of the pieces. Some few have

Ftc. 435.-Troy. Flint polishers. Actual size.

incised patterns, traced with the style on the moist clay. They are of the simplest description, a mere rudimentary combination of lines. The shapes are bulbous, not unlike our domestic iron utensils, and present many varieties. They bear a strong family likeness to one another, owing to the fact that they were all made for common uses. We cannot be surprised, then, to see this same style of earthenware manufactured side by side with pottery exhibiting a more scientific technique. Luxury can please itself, and indulge in fancies of all kinds as to forms and shapes, but such licence is denied to work-a-day life. Remains of this common earthenware have been found mixed with potsherds of painted vases, on the site of cities where the ceramist wooed ornament with the greatest success.

The intervention of the brush characterizes the vases of the second class. The designs are painted either in dark red, brown, deep violet, or white, on a yellow or light red ground; but the colours are always dull. Geometric ornament reigns supreme; yet there is a tendency towards more complicated arrangements, and a marked inclination for curvilinear lines. Henceforward effort is made to copy the living form, and models, for the most part, are sought among inferior animals. Many of the bulging shapes, of which the oldest monochrome pottery is entirely composed, are continued in these vases; but vessels of more elegant

Ftg. 436.—Broken pottery, with holes for suspension. Actual size,

outline begin to appear alongside of them. The paste has been more carefully prepared; the walls become thinner, and the vase itself consequently lighter; in this respect some of the pieces approach those of Greek ceramics. Nearly all the vases of this class have been built on the wheel (Pl. XX.).

The height of the art of the Mycenian ceramist is reached with the vases of the third class. All are turned on the wheel, carefully polished, and the external surface overspread with a lustrous covering of various shades of red, brown, or black. To the glaze with which these vases are covered corresponds a notable change in the forms and shapes. These become taller and finer, and some of the jars and jugs are outlined with

rare elegance. The decoration, too, has become more and more varied. The painter still delights in complicated arrangements of lines, scrolls, and spirals, but he has none the less greatly enriched his repertory with new forms, chiefly derived from the living world (Pl. XXI.). Vases, however, in which the human figure is introduced, belong to the closing days of the Mycenian period.

We will take the coarse, thick-walled monochrome pottery of Troy as subject-matter of this part of our study; in the first

FIG. 437,-Jug. Half-size.

place because it is the only kind which the oldest strata have yielded, and secondly because it is found plentifully, without change of shape or form, in the upper layers, where it is mixed with potsherds of a different style of earthenware.

The coarsest fragments belonged to huge vases, and were collected in the virgin soil of the oldest bed of rubbish. These wares are often imperfectly baked; the paste is tender, easily scratched with the nail, and of loose texture, which detaches itself in particles. They appear to have been moulded, not turned. There is no trace of a handle. The potter had not yet learnt how to fix it to the bodies whilst the clay was moist, or to endow it

with the needful solidity and size for the hand to get through. They soon found out the inconvenience of carrying a vessel supported from the bottom, and they had recourse to the following expedient. Additional thickness was given to the wall of the jar on three or four points below the lip, where horizontal or vertical holes were pierced, so as to admit of its being slung on a small cord and thus carried on the shoulder or the head, or hung on a

FIG. 438. - Amphora. Actual size.

hook (Fig. 436). The few specimens found whole are very like our common pots and pans (Fig. 66). Nevertheless, Schliemann publishes, as belonging to this bed, some jars which are provided with handles separately made.¹

The second layer introduces us to a much greater variety of shapes. Some of the most common types are printed below. First comes a small jar without a spout for pouring off the liquid, whose thick walls and moulded lip rendered it unsuitable for a

¹ SCHLIEMANN, Ilios.

drinking vessel. It probably belongs to the early days of the settlement (Fig. 437). The paste has been smoked black. This, and a small globulous pot with vertical holes and projecting ears in place of handles, were made with the hand. The string for suspension was passed in and out of the four holes (Fig. 438). The vase tapers below, and was not meant to stand erect. There is an evident attempt to decorate the piece which can scarcely be called successful, in the shape of very irregular circles, which surround the body and are continued on the neck; between them

Fig. 439.-Troy. Jug. Actual size.

Fig. 440. - Troy. Jug. Actual size.

are chevrons, vertical strokes, and circular cavities. The hollow lines are not filled, as on certain black wares, with white earth, to bring out the outline. Both shapes and forms are clumsy in the extreme. Some of the vases, though quite plain, exhibit a much more elegant contour; the clay has been well sifted, and this has allowed the walls to be kept thinner. The use of the lathe is visible in pottery which becomes more and more light to the eye and hand. There is a decided improvement in the attachment of the handles (Fig. 439); the jars are more carefully made, and furnished with a spout which gains in length what it loses in thickness, so as to admit of its pouring off the liquid easily (Fig. 441). Elsewhere we find wide, open-mouthed jugs (Fig. 440),

either with a single (Fig. 442) or a double handle (Fig. 443). The surface of one of these is covered with red dots, made by the potter in trying to remove the traces which the smoke of the kiln had left on it (Fig. 444).¹

We call attention to a style of vase of which countless examples were collected at Hissarlik, Schliemann alone having dug up more than two hundred.² The shape had a long existence, and is met as late as the Æolian city. It resembles an old-fashioned

FIG. 441.-Troy. Jug. Actual size.

champagne glass. It is funnel-shaped, and tapers into a pointed or slightly convex base, upon which the glass could not stand. It only admits of being laid down horizontally; the drinker, therefore, was obliged to empty it first, holding both handles. These are long, curved, and fixed to the body some way below the lip and at the bottom (Fig. 445). Schliemann is correct in recognizing in this goblet the δέπας ἀμφικύπελλον, of which mention is so often made in the Epics. The vase, owing to its double handle,

¹ All the vases of the second village, save two (Figs. 447, 448), were drawn by M. St. Elme Gautier, from pieces kindly sent me by Schliemann.

² Schliemann, Ilios.

could circulate round the table after the fashion of a loving cup; 1 yet nowhere does the poet dwell on the fact that the drinker had to drain it to the last drop before setting it down on the table in front of him. We are, then, inclined to view these funnel-shaped cups as one, perhaps the oldest, of the many forms of a δέπας ἀμφικύπελλου, for the name must have been applied to other and differently-shaped cups, to every one, in fact, provided with two handles. As already remarked, such cups are found from the second stratum at Hissarlik up to the layer which corresponds with the end of the Mycenian period. The vases of this series

Fig. 442.- Jug. Actual size.

are distinguished by a great variety of outline and by the position of the handles. We should weary the reader by attempting to represent, even with a unique specimen, each of the principal types of Trojan ceramics. Let us at any rate point out a distinctive characteristic which returns again and again in the productions of this industry; we allude to the more or less short handles or ears which facilitated prehension (Fig. 244).³ To this

Odyssey.

² It is also Helbig's opinion (Das homerische Epos). Schliemann and Helbig have shown that the same drinking-cup is indifferently called by Homer, according to the requirements of the verse, δίπας αμφικύπελλον, δέπας, κύπελλον, and αλεισον. The epithet άμφωτον, "double-eared," that is to say "double-handled," is often affixed to αλιισον, the better to define it.

³ SCHLIEMANN, Ilios.

should be added the quaint fashion of joining vases together, whether jugs, or cups in pairs, as at Cyprus. Short handles, fashioned in the mass, were discarded as soon as the potter knew how to model or stamp handles in separate pieces.

The Trojan ceramist lacked the resources which colour alone can supply to enliven the surface of his wares. His efforts in this domain were confined to incised figures, chiefly borrowed from the living form. We have already adverted to those vases in the shape of a porcupine or swine (Figs. 383-385); but what

Fig. 443. - Double-handled vase. Actual size.

tempted him above all was the portrayal of the characteristic forms of woman. Here, he is content with tracing on the body of the vessel two cones which vaguely recall the salience of the breasts; there, dots set close together around the neck to suggest a woman's necklace (Fig. 446). The imitation is often carried further, when the vase presents the rudiments of a human face, along with eyebrows and nose. The mouth is rarely indicated (Fig. 447), but the breasts are always distinctly drawn; the vulva and navel, however, much more seldom. A necklace and scarf to cover

¹ SCHLIEMANN, Ilios.

the bosom serve further to indicate the character of the image (Figs. 244, 369). On one vase the arms are even crossed in front on the body. The most complicated piece is a vase which represents a woman carrying a tureen on her head, and pressing against her breast a double-handled cup, which she holds up with both hands. Two rows of beads are about her neck (Fig. 448).

The incised style of ornament which we see on the whorls shows a great stride forward (Figs. 54, 56, 449). True, some are quite plain (Fig. 54), but the vast majority of specimens offer

Fig. 444.-Double-handled vase. Actual size.

patterns of the most varied kind, crosses, squares, rays starting from the centre, fancifully broken lines, twigs, chevrons, dots, stars, and the like.

Animal forms—insects, porpoises, and quadrupeds—are rudely figured on some of these whorls.² We also find a ball similarly ornamented; but, unlike the fusaïoles, it has no hole in the middle. These when decorated must have served as ornaments. We cannot make good our hypothesis as far as Troy is concerned; but we have evidences from graves discovered in Italy, where

the position of the fusaioles clearly indicates that they served to ornament the dead.1

The ceramic art of prehistoric Thera, ere its hamlets were engulfed by volcanic eruption, is in advance of the Trojan earthenware. Nevertheless, it still exhibits holes for suspension in place of handles, showing that the dawn of art had not long been left behind. Several shapes, however, are common to both styles of

Fig. 445.—Depas amphikupellon. Half-size.

vases; such would be those jars furnished with protuberant appendages in imitation of a woman's breasts. Nevertheless, those strange shapes which we meet at Hissarlik are absent at Thera; the prevailing forms seen here approximate those which the potter of the classic age will prefer; whilst colour, which makes its appearance for the first time, opens a new path to ceramic art, and places the Thera vases on a very high level

¹ GESELL, Foui.les dans la nécropole de Vulci.

alongside of it. Here the painted vase may be said to have been brought into being. In the hands of the painters and ceramists of Chalcis, Corinth, and above all Athens, it will become a work of art of the highest order.

F16. 446.—Jug. Actual size.

Although the clay is still impure, the proportion of vases made on the wheel is far greater than at Troy; they are recognizable from the circles which the potter made with the finger or a stick whilst the paste was still moist, as he turned the spindle and

Fig. 447.-Fragment of vase.

shaped the clay with his right hand, seated on a low stool. He has become so skilful in handling the clayey mass as to be able to turn out huge vessels with ease. We have a proof of this in a fragment which at first was taken for a twisted column; but in

place of the ascending spire which characterizes that species of support we have seven superimposed toruses (Fig. 450). It can only be a base, and from the cup hollowed in the upper cylinder we divine its having supported an enormous vase, in the shape of a cylinder or inverted cone, proportional to the pedestal.

There are other instances in Mycenian ceramics, but on a smaller scale, of very similar supports. Apart from vases of abnormal size, such as this base and the great pithoi or casks,

FIG. 448.—Vase in the shape of a woman's bust.

almost all the vases are decorated with the brush in brown, red, and bluish white. The colours are generally dull. Vases exhibiting red designs had the surface overspread with a yellow grey slip which served to bring out the vivid tint of the form (Pl. XX. 1). The engobe or slip was obtained, as already stated, by dipping the vases in a yellow or brown bath, which coloured the surface inside and out.

The prevailing patterns are very simple; annular bands running round the body, neck, or foot; squares arranged in con-





Fig. 449.-Troy. Tuszioles. Actual size.

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tinuous rows interspersed with dots; volutes, undulating lines, rings and spirals intersecting one another. Vegetable forms are by no means rare. Leaves arranged into graceful chaplets, run, here on the body of a cylindrical vase, there inside a dish; whilst flowers, perhaps irises, have been met on the mural paintings (Figs. 208, 209) of Tiryns. Occasionally animals are also introduced. A spherical vase shows us a goat or doe at full speed (Pl. XX. 1), and on a fragment there is an animal of the stag species amidst shrubs. Another painted vase is

Fig. 450.—Base of vase. Height, 35 c.; diameter at the base, 20 c.

given by Dumont, on which birds were probably reproduced, all that remains, however, are some long feathers from the tail.2

"The several decorative forms which we have enumerated present a certain unity. We see the most widely-opposed designs united together on the same piece. Similarities of make, proving community of origin, appear in all these vases. The taste they reveal is already instinct with refinement, a sincere striving after proportion and symmetry. With very simple elements they succeed in forming combinations of a somewhat elaborate character.

1 A. DUMONT, Les céramiques,

2 Ibid.

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. . . These works are primitive; but they testify to a curious mind, already on the alert, longing to invent new forms, and undoubtedly well gifted." 1

The following question naturally arises: was the pottery which has been brought out from under volcanic ashes of native make, or taken there by some trading and industrial people that would have forestalled the Phœnicians by some centuries?

Difficult though it may be to advance even a conjecture on the name of the people that fulfilled perhaps such a function, the fact that no potter's clay is to be found at Thera is not without significance; what pottery is used in the island at the present day is imported from Milos or Anaphos; but the geologist is aware that it was not so in ancient times, ere the island was torn asunder by the cruption. We have said on what sure grounds M. Fouqué rested his theory, as to the vases in question having been manufactured on the spot. He even thinks that he can put his finger, on the map, whence the potters got the requisite plastic clay.²

This piece of information is not without importance: it pre-disposes the historian to picture to himself the coasts and islands of the Archipelago as inhabited, about the time when Thera was partly destroyed, by tribes which the sea placed in constant communication with one another, none of which, however, held a sufficiently commanding position, to provide for the needs of less-favoured tribes, or have its productions accepted on a wide area. Every district, whether on the mainland or in the isles interposing between Europe and Asia, had its local manufactory. These assumed more or less importance according to the fertility of the soil or the materials placed at the disposal of the artisan. Paros, Naxos, and the adjacent islands have an abundance of marble. Here, owing to the ease with which the rock can be worked, sculpture had its being. But along these coasts, marble served to fashion objects other than idols; of it were also made vases of great capacity, which had this advantage over clay wares, that they required no baking and would last longer. In this way is explained why the art of the potter remained so long stationary in the islands. Like those of the marble figurines, the shapes of the baked wares from Antiparos are all heavy, and the decorations so

¹ A. DUMONT, Les céramiques.

² See ante, Vol. I. p. 148.

extremely simple, as to look older than either the Trojan or the Thera style of pottery. They show no painting of any kind, and no attempt is made to imitate vegetable or animal forms, whether engraved or in relief; all we see is the herring-bone pattern, traced with the nail or a pointed tool. Holes for suspension appear in place of handles. The patterns incised on the island-fusaïoles are less elaborate than on the corresponding examples from Troy. A single tomb at Amorgos has yielded no less than five hundred of these whorls; but all are plain. Some specimens, however, reach us from Melos on which the style has traced an ornament composed of a series of chevrons. On the other hand, vast numbers of marble vases have been exhumed from these graves; the shapes they exhibit are not without elegance, and recall those of the Trojan



Fig. 451.—Stone jar. Height, 9 c.

and Thera ceramics. Such would be a small jar of grey marble; the craftsman has utilized a dark vein that runs through it to form a horizontal band around the body (Fig. 451); this gives the vase the air of being painted. Elsewhere he appears to have been inspired by metal-work, notably for two boxes (pyxides); the one discovered at Amorgos,³ and the other at Melos (Fig. 452). The ornament is the same in both; it consists of scrolls arranged, like metallic wire, along the sides and the top of the box. The resemblance to a bronze piece is all the greater that one of the boxes is dark green, and the second deep grey. The interest of the specimen which we print below resides in the central design on one of the faces representing a house with a double-sloped roof. The fine hatched lines seen above the slanting beams which form the loft represent a bed of rushes

¹ Bent, Researches among the Cyclades (Journal of Hellenic Studies).

² DÜMMLER, Athenische Mittheilungen.

³ DÜMMLER, Mittheilungen von den griechischen Inseln.

thickly stacked. Nothing could well be more simple than a cup from Amorgos (Fig. 453); advance is shown in the next piece from the same place (Fig. 454). It is a stone spoon furnished with a ring, also of stone, into which was inserted a wood or bone handle. In order to preserve the spoon, which has got notched around the edge, a narrow band of silver has been put around it.

If the employment of marble was no inconsiderable factor in retarding the development of the ceramic art among these

FIG. 452.—Stone box. Munich Museum. Length, 12 c.

isles, in the end it none the less improved its methods. Thus the necropolis at Amorgos shows a decided progress on that of Antiparos.¹ The pottery is still very coarse, and its sole ornament is composed of incised lines; but by its side painted vases make their appearance. Most of the single pieces, it must be owned, are most simple and of no great variety of form, and not a few have tubular holes instead of handles. When these occur, they are narrow and clumsy, and not frankly detached from the body. Despite traces of inexperience, which I have pointed

¹ DÜMMLER, Athenische Mittheilungen.

out, the introduction of colour to enliven the best-executed vases shows a notable change in the habits of the ceramist. Hence we note with some surprise that his repertory is poorer than that of his colleague of Thera; wholly composed of the simplest combinations of geometric patterns, chevrons, lozenges opposed to each other at the apex, vertical or slanting strokes, crosses, bands running round the vase at different heights, and the like. Occasionally the neck and body of the vase are decorated by what we take to be a very free and conventional rendering of leaves. Animal forms are conspicuously absent. The status of these islands was not calculated to forward the march of industry. With the advent of the Achæan dynasties, however, whose wealth and exploits were sung by the Epic bards, affairs took a different turn. Centuries before the erection of the walls of Tiryns, Mycenæ, and Orchomenos, around which





Fig. 453.—Stone cup. Diameter, 95 c.

Fig. 454.—Stone spoon. Total length, 55 c.

were gathered troops of dependants and slaves, small groups had been settled there whose handicrafts were about on a level with those of Antiparos. The result of Schliemann's excavations at Tiryns has established the fact that the site had been occupied ere the Cyclopes cast a wall around the rock.1 Not only did Schliemann come upon the foundation walls of the earliest settlement, but he also found stone vases and rude hand-made pottery, slackly baked. The clay wares are not painted; what ornament there is has been moulded on shapes of the simplest description. Some of the vases, however, before they went into the kiln, were immersed in a coloured bath which changed the natural tone of the clay. The dawn of coloured decoration appears on a vase with white lines. Idols, whether of marble or clay, are inexpressibly coarse. The excavations in Argolis have revealed nothing to fill up the gap between this primitive pottery and that of the Mycenian shaft-graves. The biggest and most remarkable vases, painted in dead colours, came out of these

¹ SCHLIEMANN, Tiryns.

sepultures. They represent the highest effort of the fabric whose productions make up our second class. Vases of this style are worthily represented by a tinted specimen from the sixth grave, which we reproduce (Pl. XX. 3). The piece was broken into so many bits as to make a restoration impossible. On the light red ground, which is carefully polished, the brush has outlined a griffin in brown. White was used to paint the body and the eye. The wing, which was attached to the back of the neck, is almost entirely obliterated. The vase was spherical in shape, and must have closely resembled the annexed

Fig. 455.—Mycenæ Vase from Tomb I. One-fourth.

example, which we engrave as standing at the tail end of this ceramic art (Fig. 455). The spout is very short, and the attachment of the handle to the body clumsy in the extreme. Broad bands surround the body; the spirals seen on the shoulder, like those we have met on stone vases, are imitated from metalwork (Fig. 452). About the neck are protuberances which bring to mind the similar appendages of the Trojan and island pottery.

Dull-coloured fragments of terra-cotta have only been found, either in the Mycenæ shaft-graves, or the lowest beds of rubbish of the town itself, or the acropoles of Tiryns, Daulis, Orchomenos,

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¹ Our plate is a reduction of Pl. VIII. of Mykenische Thongefässe. For reasons of size we were obliged to restrict our choice to such of the fragments that have been pieced together to represent the griffin.

Ægina, and Athens. They are comparatively rare in comparison with the countless potsherds of lustrous ware representing a later style of pottery. With the introduction of new processes ceramic art acquired a development which was at once rapid and extensive. Forms and shapes became more gorgeous, varied, and interesting.

As far as we can see, there is nothing in the terra-cottas we have passed in review which greatly differs from the fragments

Fin. 456.—Pitcher from Ialysos. Height, 195 c.

collected by us in Asia and Egypt.¹ The decorations on the vases of apparently Ægean fabric offer greater variety than on the scanty terra-cotta fragments that reach us from Anterior Asia. In both instances, however, the colours employed are always dull, and the mode of applying them is precisely the same. A great improvement became apparent in the external aspect of the vases with the introduction of a glaze; this, on being fired, imparted greater splendour to the tone of the ground and of the painted figures. This style of pottery was not perfected in a day, nor

did it preserve the same level of excellence throughout its term of existence. We cannot, without infringing on the limits within which we wish to confine ourselves, divide the lustrous vases into four groups, as specialists have done, but will consider the whole series as forming but one class. The two first sections comprise pottery exhibiting new methods in the decorative scheme. The paste is gritty and coarse, and the ground and designs lack brilliancy. The third group represents the perfection of the art; the paste is pure and of a fine texture; the walls are thin, and

FIG. 457.—Amphora from Ialysos. Height, 43 c.

the yellow tone of the ground is of a beautiful warm colour. The tint of the decorations ranges from pale yellow to darkest brown; certain details are painted in white. The colours are true in tone, a quality they owe to the intense heat to which the vases have been subjected (Pl. XXI.). Most of the vases yielded by the Mycenæ graves, and almost all those that have come from the sepulchres at Nauplia, Menidi, Spata, and Ialysos, belong to this group. The fabrication of polished pottery, then, extends from the day when the graves of the slab-circle were

¹ Mykenische Vasen.

built, down to the time when cupola-buildings became general throughout Eastern Greece. That many generations went on making it is further implied by the prodigious number of fragments of this ware found all over the Ægean. Moreover, the unequivocal differences to be observed in the designs and execution could only have been produced slowly and by degrees, e.g. during the lapse of a long time. Then decadence fell upon the art. Like the fortunes of the Achæan dynasties in their decline,

FIG. 458.—Stirrup-handled amphora. Ialysos. Height, 23 c.

ground and figures—everything—grow pale on the vase. The grounds, instead of their former warm deep tone, are of a light dirty red or olive green, and the painted designs grow dull and confused. Fragments of this pottery, polished within and without, are especially collected at Mycenæ, and the unmistakable falling off in the style and workmanship permits us to read as in an open book the gradual decay and impoverishment of the community. Such differences, however, can hardly be detected away from the vases themselves. The majority of the pieces

which we shall place under the eye of the reader or describe, are taken from what MM. Furtwängler and Loeschke term the "third style."

Lustrous or polished pottery offers greater variety; it is more finely shaped and carefully executed than either monochrome or dull-coloured earthenware. Spherical forms still obtain, but they have lost somewhat of their former clumsiness. The compressed body, the graceful curve of the handle, the elongation of

Fig. 459.—Cypriote amphora. Height, 20 c Fig. 460. - Pilgrim's bottle. Ialysos. Height, 27 c

the neck, the wide-open orifice, impart an air of elegance to the vase which is pleasing to the eye (Fig. 456). Now the amphora makes its appearance; it is distinguished by a long, egg-shaped body, a near approach to an inverted cone, a pointed base and cylindrical neck, and two short handles rising from the shoulder; a shape, in fact, admirably calculated to stand wear and tear (Fig. 457). The amphora frequently assumes great dimensions, and is provided with handles of corresponding size and solidity. Now, too, appears for the first time a type peculiar to Mycenian ceramics; we allude to the "stirrup-handled" or "false-necked"

amphora" (Bügelkannen), either with a single (Figs. 166, 191) or a double neck (Fig. 458). The real neck occurs at the side, through which the liquid is introduced into the vase and poured off. Such vases were probably intended to hold perfumes for exportation; the precious liquid would gurgle to the last drop through the lateral orifice. We may consider as a variety of double-handled amphoræ, vases of globular shape, with cylindrical foot turned separately (Fig. 459). Sometimes the spherical shape of the vase is compressed, and the base flat and circular; at other times the form is that of a pilgrim's bottle, a form which

F16. 461.-Crooked jar. Attica. Height, 13 c.

found much favour with the Cypriote potter, and was obviously suggested by a gourd, which it closely resembles. It is found with or without a handle (Fig. 460).

In the forms hitherto described, the main axis of the vase is parallel to the vertical, forming a more or less open angle. Such would be the specimen (Fig. 461), where the arching of the handle corresponds to the curving in of the neck and shoulder. Of all the shapes seen in Mycenian pottery, the first place must be given to a jug preserved in the Borély collection at Marseilles.

¹ English archæologists employ, now the German term, now the English paraphrase "false-necked," to this style of amphoræ. We found a stirrup-handled vase in Caria; but the question may be asked whether the whole of Carian pottery is not of Mycenian manufacture.

Its elegant, charming contour cannot fail to strike the beholder (Fig. 477). On seeing it some ten years ago amidst the many objects collected by Clot-Bey in Egypt, I at first felt somewhat embarrassed as to its origin; but on examining at closer quarters the character of the decoration, *i.e.* the brown-black paint, and above all the design, position, and mode of attachment of the handle, my doubts fell away one by one. That we have here a very clever and faithful reproduction of metal-work must be obvious to everybody. Recipients covered all over with small holes have been recognized as chafing-dishes. Vases of this class,

Fig. 462.-Chafing-dish. Jalysos. Height, 18 c.

though unpainted, were carefully made; whilst the feet, three in number, shaped like paws, and the protuberances scattered over the surface, impart to the vessel a certain degree of originality (Fig. 462). They were probably used in funerary ceremonies to burn strong perfumes, so as to minimize the effect of smells exhaling from the vaults, when these were re-opened to let in fresh bodies. The next specimen, in the shape of a basket, with a band of spirals round the shoulder, is also three-footed (Fig. 463). Ialysos sends us a painted, well-executed vase, which is funnel-shaped (Fig. 464). Some, with small handles,

¹ M. Furtwängler was the first who published this vase, with a notice, in Arch. Anzeiger, 1893.

are of the nature of mugs (Fig. 465); others are rather tall cups, with a long handle arching over the lip (Fig. 466), and in all likelihood served to draw the wine from the crater. The last of this division is a goblet with a long stem and two handles; in shape not unlike a champagne glass. It doubtless was brought out and sent round the board at festive banquets (Fig. 467).

These few types suffice to show that the Mycenian ceramist had a refined taste, and was by no means destitute of the

Fig. 463.—Three-footed vase. Height of handle, 25 c.

F16. 464.—Funnel-shaped vase. Height, 38 c.

inventive faculty. Any one may judge for himself of the truth of our words by turning to MM. Furtwängler's and Loeschke's plate, where will be found, on a reduced scale, the leading forms which they met on their path. The plate contains as many as 120 specimens, and they cite others for which they could find no room. All these vases, not excepting the false-necked amphoræ, are endowed with good shapes, which fitted them for domestic uses, hence they have been adopted by the clever and refined potters of the classic age. True, the latter have disappeared; but the fact is probably due to some whim of fashion, or change in the habits

of the potter's customers. A comparative study, then, of the forms successively assumed by the products of the art, would lead to conclusions approximately the same as those arrived at

Fig. 465. - Ialysos cup. Height, 66 c.

F10. 466.—Cup from Attica. Height, 13 c

from the study of Mycenian architecture. The continuity which exists in the art-history of Greece from the earliest days down to historic times, will become more and more evident to higher

Fig. 467.-Tall glass. Height, 165 c.

criticism as discoveries are multiplied. The work of the ceramist, owing on the one hand to the properties inherent to the material upon which his art is exercised, and on the other to the un-

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changeableness of needs, almost everywhere alike, which he has to satisfy, is limited to a very small number of combinations. Geometric design alone, with its play of lines, admits of many arrangements, and when, in addition to these, forms derived from " **

Fig. 468. -Vase exhibiting geometric decoration. Height, 9 c.

Fig. 469.—False-necked amphora. Height, 17 c.

 the living world are introduced into the composition, their number and variety will become well-nigh endless. Such types will give rise to interpretations the number of which will depend on the

Fig. 470.-Three-handled amphora. Height, 41 c.

particular bent of the artist's mind; this will either incline him to a literal rendering of his model, or a happy selection of the fairest and most impressive features, and thus lead to the creation of ideal forms. Shapes, then, are much more stubborn than ornament, and do not lend themselves as kindly to be modified. The style of art of every race changes with the passage of time, and tends to strike out new paths for itself as soon as it finds that its old forms pall on public taste. The Mycenian decorations, whether on the walls of buildings or of vases, have a distinct character of their own, which vastly differs from that of classic art.

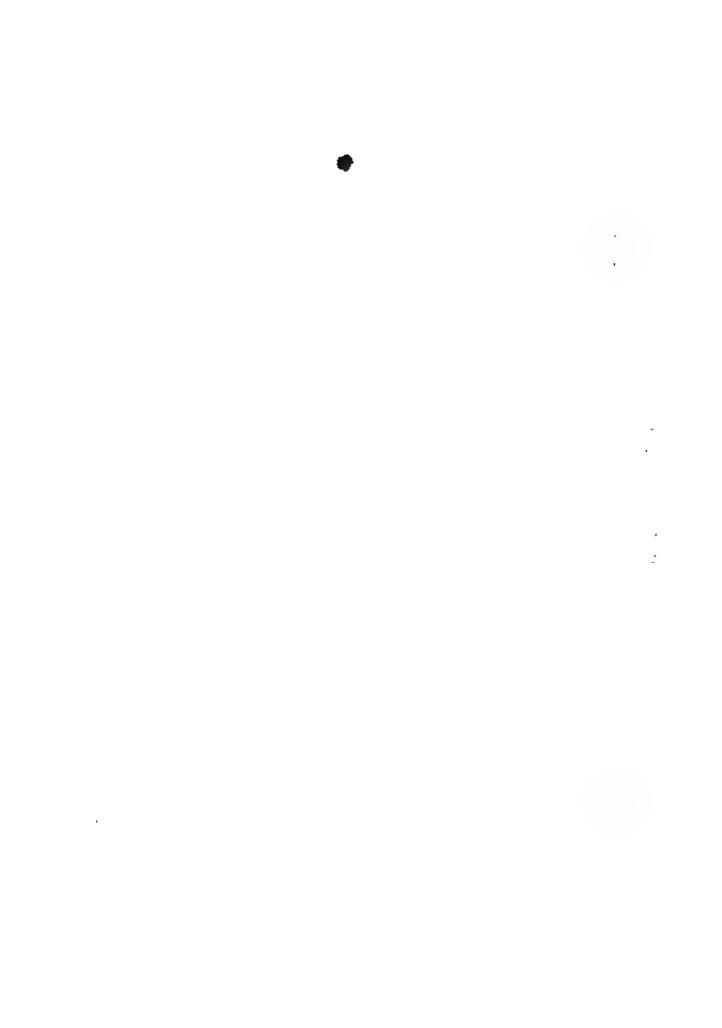
With the single exception of Thera, we have found none but linear designs both on the vases from continental Greece, exhibiting incised forms, and the oldest wares of the Cyclades. The prevailing ornaments at Mycenæ, even on dull-coloured vases, are geometric combinations (Fig. 455), and they also largely figure on the polished or lustrous specimens. Sometimes the patterns are made up of parallel, vertical, or horizontal bands,

Fig. 471.—Box from the Athenian acropolis.

doubtless suggested to the ornamentist by girdles, necklaces, or the folds of the dress. Such bands correspond to the main divisions of the human body, and were designed to recall them to the eye (Figs. 459-461, 466). The predilection of the artist for those scrolls copied on metal-work which constitute the ordinary decoration of the stone vases is as great as ever (Fig. 452). They return on pieces of quite another form (Figs. 463, 468). Others exhibit now a guilloche ornament (Fig. 469), now scales interspersed with points (Fig. 470), and now chevrons. Sometimes we see lozenges connected with one another at the apex, along with hirsute bands which recall certain vegetables, and enframe beings taken from the living world (Fig. 458).

We have seen leaves and flowers introduced in the ceramic products of Thera (Pl. XX. 2). As the painter gained greater

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proficiency in his art, he was induced to give more and more prominence to forms derived from the inexhaustible store of the vegetable kingdom. A vase introduces us to a whole

Fig. 472.-Broken cup. Orchomenos.

plant, perhaps the *muscari comosum*, whilst another shows a species of iris (Figs. 471, 472). Again, an ivy wreath fills the field of a fragment from the first shaft-grave at Mycenæ (Pl.

Fig. 473.—Circular box. Attica.

XXI.).1 Elsewhere we find a few heart-shaped leaves either arranged into chaplets, or isolated (Figs. 457, 473). At other

times we come across blossoms whose curled-back petals, strongly-accentuated pistil and stamens approach the *typha* (Fig. 474). Covering the Marseilles ewer are dentilated leaves which belong to sea-weeds, and which from the mouth of the trilobate are

Fig. 474.—Three-handled amphora. Ialysos. Height, 53 c.

made to radiate towards the circumference, their extremities being lost amidst the rugosities of the rock (Fig. 477).

The transition between plants and animals is bridged over by those zoophytes, sponges or corals, whose quaint outlines



Fig. 475 —Mycenæ glass-paste.

appear on several vases (Figs. 429, 476-478). So, too, the ceramist has drawn from the depths of the sea polyps, whether cephalopods, or the *nautilus argonauta*, and octopus or cuttle-fish.

As to the argonaut, we have already made his acquaintance on a Tirynthian fresco (Fig. 237), and numerous glass-pastes

Fig. 475.-Vase exhumed in Egypt. British Museum.

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(Fig. 475, and tail-piece of chapter). We have seen it disporting itself amidst the sea-weeds and madrepores which carpet the surface of submerged rocks, and which compose the decoration of one of the most curious vases of the art (Fig. 429). We find it again on a fellow vase, which is so strikingly alike to the above in point of execution as to look as if it had come from

Fig. 477.—The Marseilles ewer.

the same workshop (Fig. 476), and it rears its head on the Marseilles ewer (Figs. 477, 479).

By far the best representation of the octopus is seen on a stone vase from Mycenæ (Fig. 478). The workman, it would appear, took the eledone for his model, which differs from the polyp in having but one set of breathing apparatus instead of two. The rendering of the animal is true to nature; its eight suckers, its pair of big eyes, and the bag which forms the body are all in place; whereas the treatment of the decoration on a

vase in the Tshinli-Kiosk Museum at Constantinople is carried to the extreme limits of conventionalism. The vessel was found by Hambdi-Bey—during the excavations which he carried on in the Æolian necropolis of Pitane—to whom I am indebted for the annexed drawings (Figs. 480, 482). The first represents the vase itself, and the second shows the ornament drawn out at length. It is a stirrup-handled amphora, painted in red with touches of black, on a pale yellow ground. The lateral spout is broken.

The above amphora is one of the many specimens that have come from the shaft-graves of Peloponnesus and Mycenæ; together they enable us to comprehend the different kinds of pottery made by the inhabitants, or such as were obtained from foreign sources, during a thousand years or thereabouts. products of local manufacture must have far exceeded imported wares; nevertheless, the technique of the vase under notice points to its having come from an important centre. Monochrome pottery is abundantly found at Pitane, in Mysia; the clay, which is almost black, is as coarse and the forms as rude as at Troy. This primitive earthenware was, it seems, immediately followed by vases overspread with a white lustrous slip, on which the subject was painted with a light red colour. Like the Camiros examples, they exhibit sphinxes, flowers of the lotus, and the like. A few vases, found at rare intervals, generally small. with red ornaments, wreaths, and palmettes upon a black ground, take us to the red pottery, with reliefs, of the Roman period.

The highest effort of the painter is beheld in the elaborate subject represented on this vase. The respiratory organs of the creature are not indicated. The eyes are replaced by spirals, and the body is unnaturally elongated. Mollusks, fish, birds, and quadrupeds move in and out of the huge fellow's tentacles. At the extremities of these, and around the body, are undulating lines apparently designed for sea-waves. The question may be asked whether these creatures, severally, have been dropped there intentionally, or merely for the sake of filling the space, and if so, whether the painter did not choose the arrangement to convey an allegorical meaning not very hard to grasp. I showed the vase to the eminent zoologist, M. Houssay, who is known to archæologists for his co-operation in the expedition of Dieulafoy to Susiana.

¹ The drawings in question were made under my supervision by a pupil of the Turkish School of Art, founded and directed by Hambdi-Bey.

Fig. 478.—Mycenæ. Stone vase. Diameter, 18 c.

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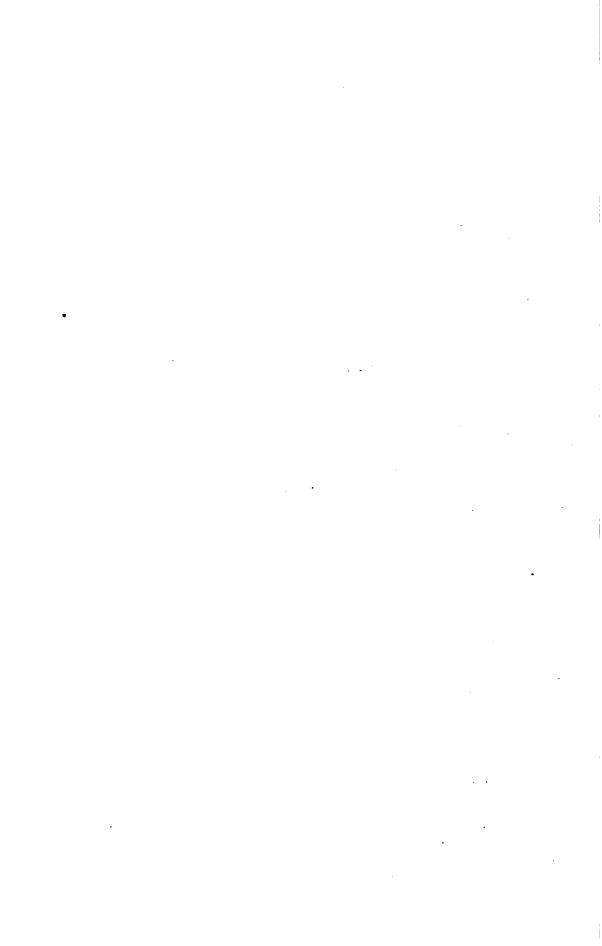
According to him, we have here a whole theory of spontaneous generation, a graphic exposition of a naïve hypothesis, by which the awakening intelligence of the men of that period strove to explain the origin of living beings, an hypothesis which was afterwards taken up by Ionian philosophers, and invested by them with an outward show of science. If the theory be tenable,

Fig. 479.—Decoration on cover of ewer.

the composition should be considered as the earliest expression of beliefs traceable through successive ages down to our own day. Such beliefs are still current among the fishermen of our coasts, who firmly believe that ducks are produced from barnacles. Time was when the tales relating to the metamorphoses of the barnacle were retailed by travellers, and even by sober-minded naturalists.

¹ Upon the belief in question see Max Müller, New Lessons on the Science of Language.

Here the soft, flabby mass of the polyp-and a gigantic polyp it is-would represent plastic clay, and thus symbolize matter which, under the action of salt water, teeming with life, is changed into all manner of animals. The curves which, like a network, surround the entire soft mass, would indicate the powerful and manifold effluvia belched forth by this generating body, the eddying of the flood which it emits after having drawn it in and fecundated it. The cluster of spirals in place of eyes would stand for gyrating motion. The filaments that fringe the outlines would represent the dawn of organisms just as they begin to settle and emerge from the mass. This creation, or rather transformation, is effected on several points of the funnellike body, whence the cuttle-fish continually sends forth fresh water on its bronchia or gills, as well as in the curling wavelets produced by the motion of the tentacles on the surface of the water. Of the animals floating amidst the feelers of the polyp, some, notably on the left, borne along by the current induced by the rhythmic contractions of the respiratory apparatus, receive their definitive form whilst passing through what may be termed the central focus, when the operation has failed to take place within the liquid mass. Such creatures as are already complete, geese or flamingoes, are seen to wing their way towards free air, infinite space, where they will unfold their pinions; special types having been selected to make plain the idea of the artist. On the left appears an actinia, or sea-nettle, which has just been detached from the polyp, and is starting on an existence of its A porcupine, lately a sea-urchin, appears on the right; he is now provided with paws to enable him to move on the earth. Near to him there is a horse, with as yet only the fore-quarters; then comes a hippocampus (hippocampus antiquorum), a small fish abounding in the Mediterranean, and on the high-road to being turned into a quadruped. M. Houssay would ascribe the same intent to the decoration on the external face of a vase from Crete, which was evidently used as a receptacle for human bones (Fig. 481). Here, too, the scene is laid in the liquid element, for actinia are seen at the bottom of the water, above which float sea-weeds; fish swim around large clustering leaves whereon ducks are perched. These leaves play the part which superstition attributes to cirriped shells or limpets (lepas anatifera). Three of the leaves have just opened, and given passage to as many



ducks, in the act of emerging from a groove seaming their centre. To make the relation between bird and foliage clear to all, each bird preserves the distinguishing feature of the leaf out of which it came. Thus the dark oblong mark that forms the centre of the leaf returns on the two ducks left of the top leaf. This elongated black lozenge is absent from the lower leaves, and no sombre markings appear about the birds perched on them. The middle duck, on the left, is larger than the others because older, and therefore more complete. None of the creatures have reached their full development; this is shown by the articulated filaments on the back of the ducks, which in time will grow into wings. So, too, the fish are still imperfect and without scales. The vase admits of fewer personages than the amphora, but the import is the same. The painter, after a fashion of his own, has chalked out on clay a new chapter of Genesis, which Thales was subsequently to write.1

We may be accused, perhaps, of having credited the Mycenian artist with conceptions far above his intellectual capacity; but does it follow that because the men of that time had no books they were therefore devoid of ideas, and had not tried to unravel the problem of the origin of things, which, to a mind unconscious of the narrow limits of human knowledge, would seem an easy matter enough to solve? By accepting M. Houssay's conjecture, certain details beheld on these two vases, especially that from Pitane, which would be hard to grasp on any other basis, are satisfactorily explained. Why are birds placed in the depths of the sea? Why is the butterfly opposed to the actinia? Why is the porcupine there, unless it be for reasons which we think to have grasped? The moment we place ourselves in that order of ideas, we comprehend as we never did before the evident pleasure which the painter appears to have felt in the portrayal of marine animals. On the exterior of a tall, double-handled cup he depicted a cuttle-fish, or rather the slim-bodied calamar (Fig. 483). But he contented himself with expressing the two great feelers which distinguish the species, and suppressed the six smaller ones that surround the mouth. The decoration upon

¹ Max Müller has published a figure representing a dead tree covered with halfopen shells, from which emerge tiny birds; some fall on the earth and fly through the air, whilst others tumble into the sea and immediately begin to swim. It was extracted from a book printed in London as far back as 1597.

a jug from Ialysos occurs again and again on the products of this ceramic art; it consists of a number of cylinders interspersed with pellets, and continued up to the necking or the handle with four or more spirals. The two central ones are connected with each other, but all are joined to the collar or handle of the vase (Fig. 456). Some have identified cylinder and wrigglings with the serpula, a species of worm of the family of the *Annelida*,

Fig. 481.—Ossuary from Crete. Length, 99 c.

which lives in the moist sand of the sea-shore; but the resemblance is very far-fetched indeed. If the form represented by the potter bears a general resemblance to the serpula, the mæanders or zigzags are his own addition. This annelid returns with the actinia on a stirrup-handled vase, where a large fish forms the principal object (Fig. 484).

Birds, outside of these vases, where they are associated with the sea element, are rare enough. A fragment of pottery discovered at Spata has a bird shockingly ill-drawn (Fig. 485). The image

Fig. 482,-Pitane. Decoration of amphora drawn out.



seems traced by a hand utterly devoid of practice in geometric drawing. The body of the bird is a mere round ball. design is more correct on the handle of a Mycenæ vase (Fig. 489).

Quadrupeds are seldom found, except on vases of the decadence. A fragment shows us oxen feeding, and flowers scattered in the field (Fig. 486). The drawing is mediocre, and scarcely better on another sherd, on which are figured a hare chased by a dog (Fig. 487). The bodies are elongated, as on the daggers. As to the human figure, it is only seen on vases of the latest style of this art; such would be a fragment picked up at Mycenæ. The head and feet are gone, and the body is apparently covered with a cuirass, or close-fitting coat of mail. The legs, from the

Fig. 483.—Goblet from Ialysos. Height, 85 c.

knees downwards, are protected by leggings and thongs. The costume is known to us from mural paintings (Fig. 430). same style of dress occurs on the body of a crater, whose fragments were found at Mycenæ, in the ruins of a house south of the slabcircle (Fig. 488). This vase deserves special attention as the only representative of its class. The design is painted with pigments varying from yellowish-brown to dark red, with dashes of dull tones to indicate the dress and armour. The shields are light brown, in imitation of leather. The head is covered by a helmet with two projecting horns in front, and a plume hanging down behind. White dots are sprinkled over helmets and girdles. The exposed parts are merely outlined and not coloured. VOL. II.

left arm, which carries the shield, is conveniently covered by it. To have shown them both at once was a feat far beyond the capability of the draughtsman.

h 16. 484. - False-necked amphora. Crete. Height, 115 c.

Fig. 485.—Chip found at Spata.

It has been impossible to reproduce all the personages. The group is repeated with slight variations on the other side of the

Fig. 486.-Chip from Mycense.

handle, and is rather well drawn; at the point of junction with the body of the vase is a calf's head in relief; birds, one on either side of it, front each other (Fig. 489). There are notable differences enough from one group to the other. On the first, the soldiers appear in marching order; the lances are carried on the shoulders and the shields hang down at the side, like those of people that have nothing to fear. The lances of the second group have been brandished, and are now directed against the foe; the first foot is pressed forward, so as to follow the movement of the body. The shields are carried higher. All the warriors are dressed alike. They seemingly wear sandals, fastened by many thongs, and a short fringed tunic, which reaches to about the middle of the thigh. Like the heads on the Vaphio vase (Fig. 374), the upper lip is closely shaven, and a pointed beard falls below the chin. As will be noticed, there are many analogies between the two sets of figures; yet there are also

Fig. 487,-Fragment from Mycente.

some divergences. Thus, the men on the reverse wear a simple skull-cap instead of a helmet, which here is a trifle more elaborate than that of the ivories and bronzes (Figs. 349-351, 359, 373); but its rough appearance may be intended to represent the hairs of the skin of which it is made. Fastened to the lances of the marching warriors, just below the points, is an object resembling a bag; the pouch-like appendage must be meant for a knapsack.

If in the scene on the reverse no bag is attached to the lance, this is easily grasped. Before the engagement soldiers would very naturally rid themselves of a weight which would have been in their way; nor are the shields quite the same. They are almost spherical in the first group, and appear to be oval-shaped in the second.

It was no manœuvring scene which the painter designed to depict here, but a battle-scene in good earnest. This is proved by the long-robed woman who stands behind the warriors and raises her hand to her head in token of distress. Her attitude is analogous to that of the corresponding figure on the Vaphio vase (Fig. 358); and like this, her relation to one of the men is probably that of mother or wife. As to the connection between the two bodies of troops, it is rather difficult to make out. Were they advancing towards each other we should understand easily enough that the two forces are about to fall upon one another; but all the warriors are moving in the same direction, from left to right. Again, if we consider them in the light of hostile troops, how are we to account for the fact that the body which is menaced by the lances levelled in its direction should look as unconcerned at the impending danger as if they were on parade-ground? is more likely that the two groups stand for two corps of the Mycenian host. The light troops are already engaged in the struggle; behind them, the hoplites, with crested helmets and huge shields, are advancing in close array to support the vanguard.

The theme depicted on this vase is sufficiently divergent from the ordinary ornaments of the ceramic art of that period to have raised the question as to its having any right to be placed within the range of Mycenian pottery. The best-informed judges, however, have no misgivings on the subject. As they pertinently observe, these are not the only evidences of the same nature we have to judge from,1 and if no guess can be hazarded in regard to them, it is because the graves in which they were found are mute and poor graves, the end of that period being as yet unrepresented by sepulchres of importance. Potsherds collected in the upper layers of detritus, at Mycenæ and Tiryns, are the sole relics that have come down to us of the ceramic art of the last days of the Achæan world. The technique observable in the vase just referred to is that which characterizes the unequivocal products of the art we are considering. analogies that have been adduced as vouchers of this relationship, may be added one more, namely, the curious crescent-shape assumed by the woman's skirt below the knee; this has often been noticed on the bas-reliefs and gems, but the fashion was not

¹ Mykenische Vasen.

Fig. 488.—Decoration on fragments of crater. Actual size, 23 c.

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retained by the art of the following age. If the potter who painted the valiant men of Mycenæ stands on a much lower platform than the engraver or the goldsmith, he yet reveals himself their countryman and contemporary, and as having to a certain extent been influenced by them. His drawing is far more faulty; but it also possesses some of the qualities of theirs. Taken as a whole, the proportions are good, the modelling of the parts is firm, and what is more, we find movement, that distinctive characteristic of Mycenian work, frankly indicated; look, for instance, at the least injured of the figures brandishing the lance.

Fig. 480,-Handle of crater.

These vases close this division of ceramic art. What we find intermingled with their remains, near to the soil surface, both within Cyclopæan fastnesses and avenues leading to certain tombs, are fragments of a later epoch, belonging to what archæologists call the "dipylon vases." We cannot dismiss the products of this industry without at least adverting to questions which face the historian, even though he is not in a position to solve them. Where was polished or glazed pottery—destined to so brilliant a future—first manufactured? What was the extent of the area over which it disseminated its products? Was its fabrication carried

on in a single locality, or in many workshops distributed around the Ægean, each one of which was distinguished by processes and tastes of its own? To the first question it is difficult for the present to give an answer. Vases painted with dead colours were known to the civilization of the Cyclades, which is generally considered older than that of Argolis. Several fine examples of this fabric have been discovered in those quadrangular troughs, made of tufa, and fastened down with a large slab, which Thucydides identified with Carian sepultures,1 whether at Thera, Cyprus, Amorgos,² or Melos.³ The use of a varnish or glaze to heighten the colour of the vases would appear to have been early, for fragments of lustrous pottery were found at Thera in the houses buried under puzzolana.4 They did not find out, however, until much later how to make the most of the invention. As already remarked, the objects that have come from the oldest establishment at Tiryns show that industry was less advanced at the beginning of the archaic period on continental Greece than in the islands; a fact easily understood, in that the isles were less distant than the mainland from polished communities of long standing, such as Egypt, Babylonia, and Assyria.

Whether we consider the question from the result of the excavations, or bear in mind that the march of ancient culture was from east to west, we find no reason for placing the beginnings of the painted vase in Argolis. Nor would the question be advanced by calling to our aid the peculiarities of style which characterize Mycenian pottery; for here again, if the probabilities alone are considered, a diametrically opposed conjecture is reached. What struck us most, as we examined the decorations of these vases, is the predilection shown by the painter for marine organisms, flexible sea-weeds unfolding with the wave, polyps and shells that live and die on the piece of rock where they had their being, mollusks with long tentacles which the fisherman sees floating amidst a veritable forest of weeds. We have even caught on the wing, as it were, the intent of the artist who chose the liquid element to explain the first manifestations and metamorphoses, the mysterious arcana of life, its infinite diversity and perpetuity. On what spot was it most likely that

¹ Thucydides. See also observations by Furtwängler, Mykenische Vasen.

² Athenische Mittheilungen.

³ Ibid.

⁴ Mykenische Vasen.

such beliefs would originate and stimulate his curiosity? Was it not on the sea-shore, among a population that lived on the sea, and of the sea?

The Mycenians, however, had only a distant view of the ocean; and their neighbours of Argos, Tiryns, and Nauplia, though somewhat better situated in that respect, were after all, like the other inhabitants of that fertile plain, husbandmen and artisans rather than mariners. Until our view is controverted by a close analysis, made with the help of the microscope, of the pottery in question, as M. Fouqué has done for the Thera vases, we shall provisionally place in the islands, rather than on terra firma, the point of departure of the style which is defined by the prevalence of designs derived from marine plants and animals, and which some have proposed to call Pelasgic. Where did this preference first show itself? Was it in Crete, where vases bearing unequivocal marks of this style are found in plenty? Or Rhodes, in the Ialysos necropolis for example, whence has come our finest collection of lustrous pottery? I know not; but I cannot forbear looking towards those islands as to the site that will make good my forecast.

If the origin of the so-called Mycenian style remains an open question, this does not apply to the boundaries of the vast area where, no matter the localization of the productive centres, this fabric sold its products. It would appear that, thanks to the elegance and variety of their shapes, as well as the quaintness of their decoration, they were long in vogue, and accepted in distant marts. The best-preserved of these vases have been especially furnished by the necropolis of Ialysos, whilst those of Attica and Peloponnesus, Egypt, Phœnicia,² Thessaly,³ the

¹ The Cretan pottery is imperfectly known. M. Joubin has made a catalogue of such pottery or fragments of Mycenian pottery as he came across in public and private collections on different points of the island. The octopus is often represented. He printed two vases that contained bones, analogous to those published by Orsi in the Bulletin de correspondance hellénique, 1892. See also E. Fabricius, Alterthumer auf Kreta, IV. Funde der mykenischen Epoche in Knossos. M. Haussoullier was the first to draw attention to the Cnossian vases, as far back as 1880.

² The Guimet Museum preserves a false-necked amphora of Mycenian style, said to have come from the necropolis at Sidon.

³ Furtwängler, in 1886, wrote that he knew of no Mycenian vases from Northern Greece. Since then the gap has been filled up by P. Wolters, who has published a whole series of vases found by him in the graves situated in the Thessalian district of Pagasæ (Athenische Mittheilungen, 1889).

western coasts of Asia Minor, Rhodes, and Cyprus, including the Ionian islands, Eastern Italy, and Sicily (Figs. 490, 491), are One is even reported to have been carried scantily represented. by trade to Spain in ancient times.1 Such vases not only furnished the graves of the islands of the Archipelago, but also those at Kalymnos and Carpathos, whence have come examples in every respect as remarkable as the Ialysos and Mycenæ wares.2 The earliest excavations at Hissarlik yielded hardly any pottery of this style; but in 1890, and especially 1893, entire lustrous vases (Fig. 402), and sherds without number, were dug up; one and all are distinguished by decorations and technique proper to Mycenian ceramics.3 The fragments in question are found in the stratum which corresponds with the third settlement, e.g. the citadel that rose on the ruins of the burnt city. The last campaign has cleared considerable portions of the castle wall, and shown that the third city extended over a much larger area, and therefore was more important than had been deemed possible at first. Furthermore, comparison between the vases has proved that we should consider the third citadel as coeval with the Mycenæ of the first known period, and coinciding with the dynasty buried in its acropolis, whose wealth and influence harmonize with the part which tradition attributed to the Atridæ. In this view of the case, we should have here the real Homeric Pergamus. Were the fragments which we find mixed with the ruins of Ilium supplied by Mycenæ ere she besieged and destroyed it? Shall we admit, with MM. Furtwängler and Loeschke, that all or almost all the vases that

¹ On Mycenian vases discovered at Oria, in the territory of Otranto, see *Mykenische Vasen*; for Sicily, *ibidem*; and above all, the researches of P. Orsi, which he prosecuted in the Plemmirion peninsula, near to Syracuse, and which he published partly in the *Bollettino di paletnologia italica*, 15th, 16th, and 17th years, partly in the *Monumenti antichi dell' Accademia dei Lincei*, 1893. We shall deal elsewhere with the results of these discoveries.

² The vase to which I refer was pointed out to me by Furtwängler. It consists of a box and cover belonging to the latter end of Mycenian fabrication. It is figured in Gascon de Golos' work, published at Saragosa. The author connects said box, but erroneously, with the *Ceramica Iberica*, for the character of this antiquity is unmistakable. The place where it was found is not specified, but it was somewhere in Spain.

³ PATON, Vases from Calymnos and Carpathos (Hellenic Studies, 1887). According to Furtwängler (February meeting of the Archæological Society, Berlin, 1888) the vases from Carpathos belong to the third style of glazed pottery, and those from Kalymnos to the fourth style, which is seldom seen outside of Mycenæ.

bear the mark of the style which we have defined were manufactured in Argolis?¹ I find it even harder to accept this theory than that which would place in Argolis the cradle of this ceramic

FIG. 490. - Amphora. Sicily.

art. The vases were of course not all made where we now find them. The fact that a certain number have been discovered in Egypt would suffice to prove that they must have been extensively

F16. 491.-Mug. Sicily.

Fig. 492.—Stirrup-handled amphora. Troy.

exported; but until the microscope declares that the clay of the Argolic pottery is exclusively found in the Argolic plain, we submit

¹ Bericht, 1890. Dörpfeld sent me photographs of at least fifty fragments of similar style yielded by the last campaign.

that we have no ground for assuming a unique centre of fabrication. The resemblance between these vases, it is urged, is so close as to look as if they had all come from the same workshop. Such resemblances, although undeniable, are not without differences both in the designs and execution. These, according to MM. Furtwängler and Loeschke, are to be explained by difference of dates; but whilst allowing for change of taste and fashion, why should not the varieties in question be due to the particular sites where they were manufactured? The affinities observable in these products, even on the hypothesis of multitudinous workshops, are not at all surprising. If these vases travelled as far as the mouth of the Nile, it follows that the Ægean was at that time ploughed in every direction by crafts that served to connect its lines of coast with one another. If they plied steadily to and fro, from Crete or Rhodes to the European and Asiatic continents, if between the single groups there was a constant flow of exchange, why should not skilful artisans, who had been trained in the best workshops, have tried to improve their lot by wandering abroad to some other island or continent, wherever a munificent prince was likely to employ them? The one thing which is indubitable, is that Mycenæ, with its many commercial tracks and outlets on the Gulfs of Argos and Corinth, cannot have failed, during its palmy days, to be one of the principal centres, perhaps the principal one, of this manufacture; and, for technical reasons, its products were most sought after. Tradition had preserved the memory of princes whose lordship was exercised over a portion of Peloponnesus and the islands; and the ruins of Mycenæ are certainly the most extensive and imposing of any ancient city, representing the ambitious efforts of the ancestors of the Greek race. A species of halo attached to the products that issued from the workshops of the wealthy and celebrated capital of the Atridæ. The Mycenæ artist was, no doubt, for a century or two, the arbiter and ruler of taste, the man who set the fashion in matters pertaining to elegance, throughout the eastern basin of the Mediterranean.

¹ Mykenische Vasen.

Glass.

We have more than once alluded to glass-pastes, pierced with holes, so as to admit of being made into bracelets and necklaces, now shaped as beads and discs (Fig. 493), now adorned with incised forms to serve as seals, now used as inlays either for furniture (Figs. 241, 494) or personal ornaments, or inserted



FIG. 493.—Glass-paste. Actual size.

in the stone friezes of royal buildings (Pl. XIII. 1). Several representative specimens have already been figured by us (Figs. 240, 241, 335, 336, 382; tail-pieces of Chapters IV., V., VI., VIII., IX., X., XI., XII.). The term "glass" used here is somewhat misleading, and requires a word of explanation, lest the reader should form a wrong conception in regard to it. The material in question is not colourless glass like ours; nor is it glass which, though artificially tinged, retains its transparency. The objects designated by this name consist of a semi-pellucid paste, always coloured white or blue. We have published several examples of the stone moulds in which the material was impressed. On such spots where these pastes are met with, specimens of similar ornaments may be counted by the hundred. As many

¹ History of Art; SCHLIEMANN, Mycenæ.

as eighty pieces were picked up at Spata which had all been stamped in the same mould. They probably mark the site of an ancient workshop.

If they knew how to produce blown glass, it was not until the end of the Mycenian period, and the new process does not appear to have been carried very far. Fragments of glass, apparently from drinking-cups, with a whitish or greenish ground, and black or yellow bands, have been excavated at Mycenæ.¹ But slender tubes, found either isolated or as border to small

Fig. 494. - Glass handle.

plaques, could be made without the hollow cone of the glass manufacturer (Figs. 495, 496).

Like the art of the potter, glass-making requires the intervention of fire; but a much higher temperature is necessary to fuse sand than clay, which is only baked. This, no doubt, is the reason why glass objects made their appearance long after vases shaped by the hand, or even cast on the wheel. No glass has been found at Troy. But prodigious quantities of glass-pastes are found on spots where the art was practised,

¹ SCHLIEMANN, Mycence.

the process admitting of rapid production. Thus 1300 pieces of this material were collected in the Spata tomb alone. In the old layers of Troy, however, Schliemann found but six glass objects.\(^1\) Two knobs for walking-sticks, of green paste ornamented with white lines, may have been imported; as to the small beads said to have come from the same stratum, may they not have slipped down in the excavation from the upper layers? No glass has been traced in the prehistoric houses of Thera, or



Fig. 495.—Glass-paste rosette.

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Fig. 496.-Glass paste.

in the oldest cemeteries of Antiparos and Amorgos. If glass is still very rarely met with in the royal tombs at Mycenæ, it abounds in the period represented by the cupola and bee-hive graves, whether at Mycenæ, Spata, Palamidi, or Ialysos.² Glass manufacture was in all likelihood learnt from the Egyptians. But the pupil did not attain the teacher's high standard. Unlike Phœnician artificers trained at the same school, he did not teach himself to fashion those elegant glass flasks



Fig. 497.—Glass-paste.

Fig. 498.-Glass-paste.

which Sidonian and Syrian traders sowed broadcast all over the coasts of the Mediterranean. No such ambitious aims were astir in the Mycenæ or Ægean workshops; no effort was made to obtain from this material the fanciful forms and iridescent tints which form the distinguishing features of Venetian glass, the secret of which was derived or stolen from Syria. But the taste for cheap glass ornaments became none the less

¹ SCHLIEMANN, Ilios.

² Schliemann, Myana.

general, and crucibles without number poured the coloured molten paste into moulds ready prepared to receive it. Almost all the glass objects that have been brought out of the graves were of native make. The style of ornament they exhibit is that which other products of Mycenian art have brought to our knowledge. The same favour is shown to inflected and parallel lines (Figs. 215, 494), to rosettes (Fig. 495), and imitations of different flowers, palm blossoms for instance (Fig. 496) and buds of the lotus (Fig. 497); but above all, to marine forms. Here fish are seen swimming in deep waters (Fig. 240), there we have clustering shells, the trocus tuberculatus (Fig. 498), and the purple-giving murex (Fig. 500); whilst the argonaut recurs again and again on countless objects (Fig. 479, and tail-piece

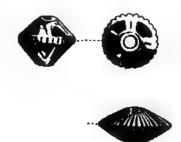


Fig. 499.—Glass-paste.

Fig. 500.—Glass-pastes.

end of Chapter XI.). Bivalves, oysters and mussels, are also met with. The presentment of deities (Figs. 335, 336) and of fictitious beings is the same as that on other instances of this art; thus, the plumed sphinxes of the ivories are beheld on many a glass-specimen (Fig. 411).¹

Glass-paste was sometimes introduced into somewhat elaborate inlays to heighten and vary the effects of colour; but it was more frequently employed to adorn the person, in the shape of ornamental buttons (Fig. 500). To glass-pastes, royalties—men and women—added a small proportion of gold buttons and squares.

¹ In order to give a more complete idea of this decoration, it would be well to reprint here those glass specimens which in our third volume were attributed to Camiros, whilst they come from the Ialysos graves. Then, too, instead of placing them as we did among the Phœnician products, they should be classed with the instances of Mycenian art. Upon the Ialysos glass-ware, which is in every respect similar to that of Mycenæ and Spata, see Mykenische Vasen.

The former, as a rule, were covered with thin gold-leaf, either pressed down with the fingers or by artificial means, so as to bring out the design which the mould had impressed on the soft material. At the time of their discovery, many of these gold leaves still adhered to the buttons. Small plates, with a tiny tube at the top through which was passed a piece of wire for threading them, were utilized either to form necklaces (Figs. 495, 496, 499) or as trimming to skirts and bodices.

Some of the pieces appear to be divine simulacra. The larger ones, representing a thoroughly conventionalized human form, could be carried about like the marble idols (Fig. 335). But the smaller served the double purpose of amulets and dress-trimming (Fig. 336). Mycenian paste never advanced beyond glass-ware.

Amber, owing to its semi-transparency, may be considered as a natural substitute for glass. In the days of Homer, amber was mixed with gold to form necklaces which the Semite sold to Greek ladies.2 If no trace of it appears at Troy, it is already found in the royal graves at Mycenæ, whilst the large beads from Menidi must have belonged to necklets.⁸ Chemical analysis has shown that these beads were made of Baltic amber; 4 a fact which, like the jade of Central Asia picked up at Troy, suggests a whole series of intermediaries across the European continent, between the Baltic and Mycenæ, and serves to explain why the material was so seldom utilized by the Greek artisan. Figurines cut in large pieces of amber, of which a goodly crop has been yielded by the necropoles of Upper and Central Italy, and even as far south as Apulia, are non-existent here. Unlike older nationalities, who found pleasure in the play and accidents of colour, Greece never set great store by glass or amber. Both materials absorb light, but do not reflect it back; and the result is a weak, uncertain outline. Glass and amber are unsuitable for sculpture, in that they cannot be made to frankly imitate or accentuate the form; now, what more than anything else distinguishes the Grecian mind, is its lively feeling, even at that early date, for the beauty of the living form.

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¹ Mykenische Vasen.

³ Schliemann, Mycenie; Das Kuppelgrab.

² Odyssey.

⁴ SCHLIEMANN, Tiryns.

Ivory, Bone, Wood, and Stone.

The timber frames which support the flat roofs of Mycenian palaces, the wood wainscoting and square beams used as linings to the inner walls of these habitations, imply workmen very skilful in the art of carpentry. The decoration of these panels must have been analogous to that seen on less perishable materials. Wood, more or less richly carved, necessarily entered into the composition of those pieces of furniture—chests and caskets—inlaid with glass, ivory, and metal plates. The Mycenæ woodcarver was no doubt quite as clever as the worker in bronze and ivory. We are obliged, however, to accept him on trust, for his work has entirely perished, save a box cover, which the dry soil of Egypt has miraculously preserved these many thousand years.¹

Gold and ivory are more resisting. Bone rendered many services which now are demanded of steel, ere the domestication of metal was widely diffused. Of it were made stilettoes, and those awls found in such quantities in the oldest layers of ruin at Troy (Fig. 501). Some are veritable needles, with a hole pierced at the thickest end.² The purpose of the small object covered all over with rings is obscure. From bone, too, were derived knife-handles, cases, and utensils of all kinds.

It was soon discovered that the finer and more precious material of ivory could be made as serviceable as bone. Some pieces of it were picked up by Schliemann in what he calls the first city,³ but he found many more in the second or burnt town.⁴ A trade having its point of departure in Africa supplied the ever-increasing demand for ivory to all the markets of Greece, where a taste had been created by the accumulation of wealth. Tiryns is represented by a unique specimen;⁵ but from the

¹ Nevertheless, a wooden fish was found within a building of the burnt city at Troy. The scales appear to have been cut with a pointed flint. Schliemann also mentions two sides of a small square box which he picked up in the fifth Mycenæ grave; each of the sides showed, carved in relief, a lion and a dog (Mycenæ). The design is that of our lid. A second but tiny fish made of wood has also come from Mycenæ.

² SCHLIEMANN, Ilios. ³ Ibid. ⁴ Ibid. ⁵ Tiryns.

royal tombs on the Mycenæ acropolis have come pieces without number.¹ Henceforward, the bone stilettoes and needles which we meet at Troy are replaced by ivory ones. That the fashion for ivory became general towards the end of the Mycenian period, may be inferred from the fact that the graves at Menidi

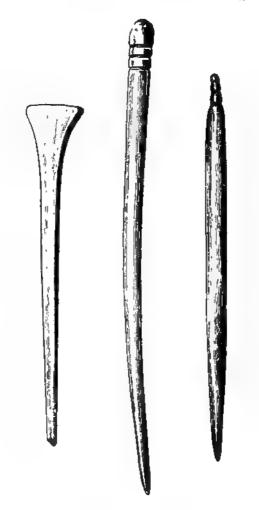


Fig. 501, -Awls and bone stilettoes. Actual size.

and Spata have yielded a much greater quantity of objects of this material than the royal tombs at Mycenæ. The dead at Spata were very small folk indeed, in comparison with those buried within the slab-circle of the royal city of Agamemnon; yet in the Spata sepulchre no less than seven hundred and

¹ SCHLIEMANN, Mycence.

thirty pieces of ivory were collected.¹ But ivory was plentiful at Mycenæ, both in the upper layers and the rock-cut tombs.²

Asia Minor and Greece received ivory in an unwrought state, and fashioned it to suit their taste or needs. A knife-hasp from Troy is quite as rudely executed as the pottery and clay idols amongst which it was found (Fig. 502). We ask, without being able to answer the question, whether the animal portrayed on it was meant for a pig or a dog. But upon the ivories and glass from Mycenæ, Menidi, and Spata, where the work is freer, the forms peculiar to Mycenian art are well defined. The decorations consist of purely geometrical figures, metopes and triglyphs (Fig. 223), and the unending variety of scrolls and spirals (Fig. 241); a whole network of lozenges with curvilinear sides, which the painter used to veil the vast expanse of his inner walls (Figs. 215, 216), including more or less complicated rosettes (Figs. 230, 231). The same animals, real or fictitious, are repeated on ivory and stone, or painted on terra-cottas. Then follow a whole series of marine animals, bivalves sometimes shown like an open oyster (Fig. 503), and argonauts.3 At other times wild animals are represented struggling with their usual prey; now, a lion brings down a bull (Fig. 396), now a dog hangs from a goat at full speed (Fig. 398). Here we come upon a crouching bull (Fig. 394), and rams moving in file or lying down (Figs. 399-401); there upon griffins (Figs. 407, 408) and sphinxes (Figs. 280, 409, 410). The design of the bas-relief over the Lions Gate returns upon a knife (Fig. 368).4 The portrayal of men's figures, their costume and head-dress, is known to us from other monuments (Figs. 359, 373), whilst in the women's dress are more particularly beheld the distinctive peculiarities of this art (Figs. 347, 348, 377-381). Finally, not a few ivory columns reproduce the exact proportions of what we have called the Mycenian order (Figs. 201, 202, 205).

Panels, furniture, and instruments were not the only instances wherein ivory was introduced; combs, too, were richly decorated with it (Fig. 280), and above all, the handles of mirrors (Figs.

¹ Bulletin de correspondance hellénique.

² Schliemann, Mycenæ. Vaphio has given little or no ivory.

³ Bulletin de correspondance hellénique. The same forms recur on ivory plaques discovered at Mycenæ.

⁴ See Schliemann, Mycena.

377, 381). The wood-carver, by dint of exercising himself in his occupation, had gained remarkable proficiency, and was able to draw from it pieces of great dimension, a plate thirty-eight centimetres long for example (Fig. 205), and the handle of a dagger some thirty centimetres in length (Fig. 368). When he had to piece several plates together, he used fine ivory nails or mortises,

Fig. 502.-Knife-handle of ivory. Actual size.

and he managed his work so deftly as to render the joints invisible.1

By this time stone and bone, which had so long furnished these tribes with all their implements, play but a very subordinate part at Mycenæ and the neighbouring centres. Arrow-heads are still made of it (Fig. 2), as well as mortars for crushing grain,² and grindstones for sharpening metal instruments, the latter having

Fig. 503.-Ivory from Spata. Actual size.

replaced the hatchets, knives, and rude hammers of a by-gone age.⁸ Then, too, boxes and vases, more or less ornamented, either marble or schist, which we have met more particularly among the Cyclades, have become extremely rare (Figs. 451, 454). We

¹ Bulletin de correspondance hellénique.

^{2 &#}x27;Εφημερίς, 1889.

⁸ In these ellipsoid stones, shaped like the half of an egg, Tsoundas recognizes grindstones for tools of large dimensions; whereas Schliemann identified them with broken hand-mills. The stone is generally trachyte, and sometimes argillaceous schist.

can only call to mind one single example (Fig. 483). Coloured stones, however, which pleasure the eye, and the valuable alabaster with its creamy tones, are as popular as ever. The alabaster vases from Mycenæ and elsewhere are distinguished by careful execution and the fine proportions of their shapes.¹ It would appear that, like the *alabastra* of a subsequent age, they were designed to hold perfumes. One such recipient was found at Vaphio, with a silver spoon in it.

Metal.

Considered as a whole, the industry of the oldest layers of Mount Hissarlik is still a stone industry; but metal, although as yet rare, begins to make its appearance. The objects which Schliemann brought out from the first village were silver, lead, and brass; he would appear to have found traces of gold, but no bronze.² The inhabitants, therefore, still belonged to the copper age, which everywhere seems to have preceded that of bronze. Trojan copper was apparently harder than what is manufactured at the present day; a property due to the presence of impurities which they knew not how to eliminate by refining. According to the layers, the native ore contains small quantities of silver, gold, and iron, in variable proportions, and sometimes arsenic or antimony.

It has been shown that Egypt, Chaldæa, Syria, and Cyprus passed through a copper stage.³ Affairs must have followed the same march in the Ægean. No tin was sighted in the first village of Hissarlik; the saw found at Thera, under the ashes of the volcano, is copper, not bronze (Fig. 31).⁴ The locality

¹ Schliemann, Mycenæ. For Vaphio, see 'Εφημερίς, 1889.

² SCHLIEMANN, *Ilios*.

³ Relating to the order in which metals made their appearance and were successfully employed, see M. DE MONTELIUS' essay, l'Age du bronze en Orient et en Grèce and S. REINACH'S critical article on the same. For Egypt and Chaldæa, consult Prof. GLADSTONE, On Copper and Bronze of Ancient Egypt and Assyria, and BERTHELOT, Sur quelques métaux et minéraux provenant de l'antique Chaldée. Dümmler's researches upon the copper age deal with the oldest Cypriote necropoles.

⁴ Fouqué, Santorin.

where the men of old first began to mix tin with copper is unknown. If the inhabitants of Anterior Asia obtained their tin from the Altaï Mountains before the Phœnicians brought it to them from Spain and Britain, it would be natural to suppose that Chaldæa preceded Egypt in the manufacture of this alloy; for she was nearer to the mines of Khorassan,¹ on the Persian frontier, where the source of tin is placed by some. Tin, burdened with the expense of transport from vast distances, remained long a rare and costly article, so that Trojan bronzes, like the oldest bronzes of the Delta, are very poor in tin; they contain but from three to six parts of it per cent.²

Bronze appears in the second village under many forms. Tools and weapons were of stone; but the chieftains already owned vases, instruments, and arms of brass. These gave them an enormous advantage over the rank and file, who were destitute of metal.

Gold, silver, and lead are among the finds that have been exhumed from these ruins. Ingots of the precious metals, of nearly constant weight, were perhaps already used for the purposes of exchange. Schliemann found six flat bars of silver, shaped like knife-blades, thickly oxidized and stuck together, of the respective weights of 171 to 174 grammes.8 Should they not be considered as the fractions of the Homeric talent? He traced no iron in the burnt city, during the whole of the excavations which are summed up in the Ilios. Two iron balls, which he picked up in 1890, were attributed by him to the second settlement; but remembering how the third village built itself over the second on a surface not previously levelled out, we can easily understand that objects belonging to the later inhabitants may have got mixed with the relics of the earlier population. single find cannot upset the conclusions suggested by the earlier The second village was unacquainted with iron; its appearance in the Troad coincides with the third establishment, which, to judge from its pottery, was coeval with Mycenæ.

The civilization of the Cyclades, even where its pottery is still incised, as at Antiparos, is already in possession of bronze.⁵

¹ The mines of Drangiana mentioned by Strabo correspond as far as locality is concerned to Khorassan.

² SCHLIEMANN, *Ilios*.

³ Ibid.

⁴ Bericht, 1891.

⁵ Journal of Hellenic Studies.

In this period gold is seldom met with, but silver less rarely. Tiryns and Mycenæ have an abundance of bronze, compounded with ten to thirteen per cent. of tin. As will be observed, the proportion is much larger than at Troy; it is that which gives

Fig. 504.—Gold cup. Length, 19 c.

the best alloy, and will scarcely ever be exceeded.¹ Lead is exceedingly common. All the necropoles containing glazed pottery make a brave show with their silver and gold; but the royal cemetery at Mycenæ stands immeasurably above them all. One

Fig. 505.—Silver vases. Height, 20 c., and 17 c.

cannot form a better notion of the prodigious wealth displayed here than in picturing to oneself the royal body, as it lay in the pit, surrounded by friends and relatives, clothed in its regalia made up of diadem, mask, pectoral, leggings around thigh and calf, with buttons and plates innumerable sewn on to the drapery,

¹ SCHLIEMANN, Tiryns.

and shoulder-pieces; in a word, covered, like a golden statue, with glittering metal from head to foot.¹

No iron has been traced in the royal tombs at Mycenæ. It does not make its appearance there until the end of the archaic period, and then only as an article of luxury, in the shape of rings that were placed in the graves alongside of gold ones.² Bronze continued to be preferred to iron long after this, because they had not yet found out how to modify it into steel. The only

Fig. 506.—Gold diadem, a trifle over half-size.

iron they knew of was soft iron; but this, when worked into a point or edge, soon gets out of order by contact with a hard material.

We are not a little surprised to find gold and silver vases at Troy. Although their dimensions testify to the wealth of their owners, they are very simply shaped, and without ornament. The most elegant, perhaps, is a gold vessel, with two handles, the shape of which approaches a modern sauce-dish

¹ Έφημερίς, 1889. 2 TSOUNDAS, Μυκήναι; Έφημερίς, 1889.

(Fig. 504). Next in order are two silver vases, with covers, and vertical tubular holes at the sides instead of handles (Fig. 505). Their shape is that of the Egyptian canopi; but the appendages at the sides, which so often recur on Trojan ware, prove that these were manufactured on the spot (Fig. 436). The vases, whether of gold or silver, were all found, along with other ornaments, under a heap of ashes. The pieces were stuck

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Fig. 507.—Gold diadem. One-third of actual size.

to one another, and in the midst of them was a bronze key, which has been identified as that of the treasure-coffer. This is what Schliemann calls the "Treasure of Priam"; but his account of how he discovered it is by no means clear.² The objects would seem to have been stowed away just before the catastrophe, in the depth of the mud wall which constituted the upper part of

the rampart. Hiding-places for storing objects of value could be easily contrived, and as easily masked with a square brick of clay. The most magnificent article in this collection is a diadem of purest gold (Fig. 506), formed by a number of small chains, which in the middle are about the depth of the forehead, but are considerably longer at the sides, where they hung down

F1G. 508.-Portrait of Madame Schliemann.

in front of the ears, and fell about the shoulders. The side bands consist of seven chains, having fifty rings each, and a spear-shaped leaf, grooved lengthwise, after every four rings. These chains are joined together by four cross ones. The long chains terminate in pendants which in rudeness approach the coarsest idols (Figs. 322-324). The short chains, fifty in number, have twenty-one rings apiece, and pendentives, like the longer

ones. Altogether, the rings of these chains and leaves amount to 1750 and 364 respectively.

The general arrangement of the second diadem, though simpler, is identical. From a large gold bar depend eight long chains, four on each side, strung together with fine wire. At the end of each one hangs an amulet; whilst the short chains terminate in small pendentives which imitate two spear-shaped leaves growing together on one stem (Fig. 507). Leaves and tiny plates were all cut with puncheons out of thin gold laminæ, and the extremely fine wire which we find here must have been passed through a drawing-frame.

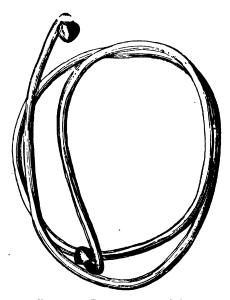


FIG. 509.—Bracelet. Actual size.

The otherwise rich and varied Mycenæ ornaments have nothing approaching these diadems. The wealth and undefined character of the design, though savouring somewhat of barbarism, lend themselves kindly to enframe a fair young face. Mdme. Schliemann's portrait, given above (Fig. 508), shows how these diadems were worn. To complete the effect of the attire, the draughtsman has added other ornaments that lay together in the biggest of the silver vases, that which contained the most valuable objects of the treasure; ear-rings, made up of the same chains and pendants as the diadems, a necklace composed of many chains which Schliemann strung together

from 8700 small rings, pierced prisms, discs, buttons, and tiny bars. Bracelets would have encircled the arms, could these have been visible in the picture. Five of these bracelets are shaped like that of Fig. 509; the sixth is simply a wire welded into a circle, terminating in a knob or hook. To this Treasure also belonged hair-pins, a pair of elegant ear-rings and gold studs, the one with a hollow stem into which was inserted the solid and pointed one of the other (see Figs. 512, 1, 3, 6).

I feel no hesitation in accepting the pieces which constitute

Fig. 510.—Gold ear-ring. Actual size.

this treasure as coeval with the burnt city. Under a seeming gorgeousness, we have quite a rudimentary simplicity of forms. The goldsmith has more nimble fingers than the potter; but his inventive faculty is no whit better. Such is no longer the case for other ornaments found in small quantities, between the south gate and the domestic abode of the chieftain, whereon are beheld two decorative forms, the rosette and spiral, to be met with in every instance of the metal-work of this art. The objects consist of ear-rings (Fig. 510), with pendants that have been recognized as idols; but the bar that holds the chain is adorned

by three rosettes; spirals and rosettes also form the decoration of a bracelet (Fig. 511), and four spirals set in pairs that of a gold ornament (Fig. 512, 5). From Mycenæ have come countless round discs of gold-leaf. Troy, however, has furnished but

Fig 511.—Gold bracelet. Seven-eighths of actual size.

three similar examples (Fig. 513). The same analogies are observable in a pair of charming hair-pins (Fig. 512, 2, 4). The design of one out of the two, though skilful, is perhaps somewhat heavy; it is composed of four rows of double spirals,

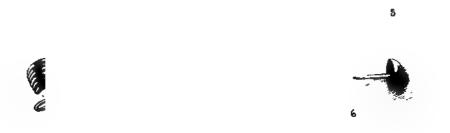


Fig. 512.—Gold ornaments. Actual size.

with side volutes, and six tiny jugs atop a rectangular plate. Finally, the processes of the Mycenian metal-worker are recognizable in an eagle formed of two small plates, held together by gold rivets (Fig. 514). The surface is decorated with incised lines traced with the point. The hole in the middle of the body

shows that it was mounted on a stem. The shape of the figure is thoroughly conventional; the crooked beak, however, clearly betrays the bird of prey.

Schliemann also ascribes these small objects to the second village; but I find it hard to believe that they came out of the

FIG. 513,-Gold disc. Actual size.

same workshop as those of the great treasure. Most of these separate finds were discovered in 1878, e.g. before Dörpfeld had become his collaborator. Examination of the style furnishes, as it seems to me, a decisive criterion. Taking as basis the character of the pottery yielded by the third town, we have demonstrated

Fig. 514. -Gold eagle, facing and in profile.

that it was contemporary with Mycenæ. Are not we authorized, until proof is shown to the contrary, to ascribe to the third establishment pieces that so strikingly recall the great system of Mycenian ornaments? Our best information in regard to the metal-work of this art has been more especially supplied by

the graves on the acropolis. With the exception of the Vaphio goblets, and a silver vase from one of the tombs of the lower

Fig. 515. - Gold ewer. Seven-eighths.

city (Fig. 374), nothing of primary importance has been found outside of these sepultures. Setting aside plain or slightly

Fig. 516,-Gold cup. Three-fifths,

decorated vases as useless for our purpose, the one thing it behoves us to make quite clear, is the taste of the goldsmith, his choice of shapes and forms. The pottery discovered by Schliemann may be divided into

Fig. 517. -- Gold cup. Three-sevenths. Mycenæ.

two classes: vases meant to contain and pour off liquids, and drinking-vessels. Some specimens of the first class are already

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FIG. \$18.-Gold cup. Four-fifths.

well shaped. No decoration is apparent on a silver ewer; 1 yet,
1 Schliemann, Mycana.

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remembering that silver is more easily oxidized than gold, it may well be that ornament analogous to that exhibited on a small

Fig. 519.—Gold cup. Three-eighths. Mycenæ.

gold flagon would be found under the ashes incrusted on the surface (Fig. 515). The model of the charming Marseilles ewer

Fig. 520. Gold cup. Half-size.

must be sought among œnochoai of this type (Fig. 477). The huge copper vessels found alongside of the gold and silver vases under notice are not so elegantly shaped. The inventive faculty of the goldsmith is shown at its best in bottles and drinking-cups. Among vases of this class no two specimens are precisely alike. Many have but one handle, and mouths more or less open. Here, ribs or channellings adorn the surface (Fig. 516); there, we behold a series of arcatures in imitation of a Roman portico (Fig. 517). Elsewhere the field is occupied by leafy branches, surmounted by an open flower (Fig. 518). More complicated work is shown on another gold vase

FIG. 521.—Gold cup. Seven-tenths.

(Fig. 519). Externally, a triple horizontal band or zone surrounds the body and divides it into two compartments, each occupied by fishes in relief, modelled in repoussé work. Then, there are tall drinking-cups or glasses provided with a foot. One of these is quite plain; but on the handle is chiselled a dog's head biting the rim of the vase (Fig. 520). The handles of some of the bowls are quite plain (Fig. 521). Under the lip, however, are modelled three lions at full speed. Finally, there is a cup which deserves special attention (Fig. 522). Its two horizontal handles are formed by thick plates held together by a small cylinder. The

lower portion of the handles is fastened by a broad gold band—which divides itself into three ribbons about the middle of its length—to the solid circular foot. Two doves, one on each of the horizontal plates, are turned to the cup and front each other.

It was in the nature of things that this vase should have called

Fig 522, -Gold cup. Three-eighths.

up to Schliemann's mind the remembrance of the cup of Nestor, which the poet describes in the following lines: "Hecamedes then placed a magnificent cup on the table, which the old man had brought with him from his own land. It had four handles, and the



Fig. 523.-Gold ewer Actual size.

surface was studded with bosses. On each of the handles were two doves pecking; the cup had two supports." Nestor's cup

¹ Hiad. We have followed Helbig (Das Homerische Epos) in our rendering of the line δίω δ'ἐπό πυθμένες ἡσαν, the sense of which was already obscure in antiquity. Schliemann takes it to signify a double bottom, that of the vase proper and the foot itself. Helbig advances valid reasons why such an interpretation should be set aside.

had four handles in place of two, and it is plain from the above lines that it was much larger than ours; but apart from these points of divergence, its general appearance must have been very

Fig. 524. -Silver patera. Diameter, 12 c.

near the specimen we engrave below. The principal figures, the doves placed about the mouth of the vase, were borrowed by the potter from the goldsmith. Thus, Cypriote fictile vases without

Fig. 525.—Bronze ewer. Height, 27 c.

handles exhibit doves in the same position.¹ New types appear with the tombs that belong to the latter end of the Mycenian period. If a small cenochce from Menidi (Fig. 523) is but a ¹ Reinach, Chroniques d'Orient.

reduced copy of the ewers that have passed before the reader's eye, no example has been discovered which approaches a \$\phi_i\alpha_n\eta_n\$ or deep patera exhumed at Vaphio (Fig. 524). Double spirals, carved in thin gold-leaf fixed by nails of the same metal, appear on the handle, and are continued in single file on the lip of the vase. The decoration of a bowl, which is described in the Odyssey, was no doubt carried on in the same style and with the same method. "It is entirely of silver," says the poet, "and its lips are overlaid with gold." The rare skill of the goldsmith is

FIG. 526.—Bronze ewer, showing ox's heads on band.

Fig. 527.—The handle of bronze ewer.

well seen in a patera from Mycenæ (Fig. 374); the handle, in place of being soldered on or fixed to the body with nails, has been worked out with the hammer from the solid plate which forms the body of the vase.²

The artisan of this epoch has shown no less imagination or taste than he who had worked for the kings buried in the upper city; on the other hand, skilful labour may by that time have become more plentiful. That such was probably the case, is inferred from the very careful decoration depicted on a bronze pitcher discovered in one of the tombs of the lower city of Mycenæ

¹ Odyssey. It is Tsoundas' remark.

² Έφημερίς, 1888.

(Fig. 525). The vase is made up of two pieces, worked separately, one for the neck, and another for the body. The line of meeting is concealed by a band of the same metal, the ends of which meet under the handle, where they are fixed by nails. These, however, would have been inadequate to secure the band; hence tiny points of about the size of a large needle, and thickly studded,

Fig. 528.—Gold pendant. Length, 36 c.

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were disposed upon the whole length of the band, and over it, again, appear seventeen ox-heads, beaten up with the hammer (Fig. 526). They are continued on the handle, where they are graven with the burin (Fig. 527). The manifold resources of the goldsmith are seen to the best advantage in the composition and mounting of the ornaments; of which specimens have already

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been figured. Such would be a gold band designed to go round a man's thigh (Fig. 106), a pectoral decorated with scrolls and spirals (Fig. 108), two gold plates similar to those found in superabundance in not a few graves (Figs. 112, 281, 356), rings of gold (Fig. 113), and several ornaments of the same metal (Figs. 221, 222, 232, 233).

The most effective pieces are decidedly the diadems. They exhibit two types. The first consists of a very elongated oval plate of gold (Fig. 529), decorated with a system of concentric bands and bosses in repoussé work, and gradually diminishing in size on either side of the largest central box. The middle line of the design is formed by bosses, each surrounded by two concentric circles; the intervening spaces are filled with fine spirals and twists. On the upper and lower edge are smaller bosses and circles. The main design is framed by a salient baguette or bar, beyond which is a border adorned with spirals. The arrangement is happy. The gradual decreasing of the bosses explains itself to the eye by the narrowing of the field; the dots at the extremities, the many twists and flourishes, enrich but do not confuse the decoration. The play of light and shade thus produced on the brilliant surface is not without attractiveness. The whole is instinct with elegance at once severe and splendid, but easily read.

The second type is of a somewhat different character (Fig. 530). The upper edge of the band describes a deep curve, and is met at the sides by a straight line. In the field are three large rosettes bounded by entwined wire. The intervening space is filled with smaller bosses and circles, having a dot in the middle. Pendants, in the shape of leaves, now almost disappeared, fell on the forehead. The design is less clear than in the other type, and a superabundance of details is not conducive to Finally, by the side of the diadems are semi-oval ornaments (Fig. 528),1 supposed by Schliemann to have been joined at their broader end, so as to form perfect diadems. The presumption, however, is traversed by the fact that the grave in which these pieces were found only contained three bodies, each provided with a diadem, and that, moreover, the line of junction—assuming that these plates were juxtaposed to constitute crowns-would have fallen right in the middle of the forehead.

¹ Tomb I. contained twenty-four, along with fragments of others.

Fig. 529.—Gold diadem from Tomb III. Length, 50 c.



They were pendants, worn on the girdle or on the breast, where they were fastened on to a band of leather, or some other perishable material, by a thread or wire passed through a species

Fig. 531.—Gold disc. Actual size.

Fig. 532.—Gold plate, Actual size. Mycense.

of tube formed by the edge of the plate, which was folded back at the broader end. Pendants similar to these may be seen on

F1G. 533.—Gold disc. Actual size.

Fig. 534.—Gold disc. Actual size.

a small statuette from Tiryns (Fig. 341).1 Again, these plates are pierced in the middle of each of their long sides; the thin

The explanation is due to Schuchardt.

wire preserved in some of the holes was evidently intended to carry accessory triangular pendants, which have been found in considerable numbers among the objects in the grave. Diadems and semi-oval ornaments belonged to women. From the shape

Ftg. 535.-Gold ornament. Actual size.

of the bones, Schliemann came to the conclusion that women were buried in these graves.\(^1\) His conjecture is confirmed by the observation, that whilst the remaining graves were literally filled with weapons, none were brought out of Graves I. and III.;

FIG. 536.—Gold studs from Tomb IV. Actual size,

the ornaments collected here, ear-rings, hair-pins, beads, etc., being of a class rather worn by women than by men. In Grave IV. three men and two women were found. Accordingly, by the side of weapons with which the pit was packed, appeared

¹ SCHLIEMANN, Mycenæ,

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ornaments exclusively worn by women. There can be no doubt that the diadem-character we have attributed to the two large bands is correct (Figs. 529, 530). Not only are their shape and dimensions in harmony with such a destination, but very similar diadems are represented on terra-cotta figurines and intaglios (Figs. 331, 337, 376, 416). "Finally," says Schliemann, "around the head of another of the three bodies was found a splendid and artistically-worked diadem, to which was still attached part of the skull." 1

Besides semi-ovals, rich gold ornaments made of leaves

F16. 537.-Gold plaque. Two-thirds.

arranged in the shape of a cross were also sewn on to the apparel; numerous specimens came out of Graves I. and III.² In the centre of each cross is a hole for the thread which served to fasten it on to the robe. In addition to these, Schliemann picked up in Grave III. as many as 701 large round gold plates (Figs. 531-534). He found them "as well below as above and around the bodies." They must have been glued on to the garment, so as to fill up the spaces left by the principal ornaments, thus enfolding the corpse on all sides. The designs on these beautiful plates may be divided into two

¹ SCHLIEMANN, Mycenæ.

classes. Some are dependent on metal technique, and consist of curvilinear figures variously combined (Figs. 112, 356, 531). Others are derived from the vegetable and animal kingdoms, and repeat those lower animals for which the ceramic painter showed so marked a predilection. The rosette stands midway between these two forms (Fig. 281). The second class is represented by leaves with radiating markings (Fig. 532), by cuttle-fish (Fig. 533), and butterflies (Fig. 534). All the plates have been stamped in a mould; from it cannot be obtained the freedom and fanciful play of the brush. Accordingly, the rendering of the leaves and animals is much more conventional than the corresponding figures on the vases. It is the same

Fig. 538.—Gold plaque. Two-thirds. Mycenæ.

with the plates whereon are represented animals in profile (Figs. 397, 404, 406, 412). Thus, Grave III. yielded no less than twenty-nine, and Grave IV. fifty-three replicas of the octopus, whose feelers are arranged with geometrical precision. The same remarks apply to the plates decorated with butterflies (Fig. 535). The linear ornament seen on most of these gold plaques returns on smaller and slightly-convexed discs, the relics, it would appear, of the decoration once beheld on sword-sheaths. The same style of ornament re-appears on the buttons whose strange shape caused archæologists to mistake their true purport and origin (Fig. 536), fortuitous resemblances having been exaggerated into real analogies with this or that Celtic or Merovingian type of goldwork. The buttons consist of a gold-leaf stuck on a wood or bone core, upon which the design had been previously traced

¹ Schliemann, Mycenæ.

with the point, the metal being forcibly pressed down so as to penetrate the hollows and marry the reliefs of the core. The main design consists of a lozenge with a rosette at the upper and lower end; bounded, now by a row of discs, now by four pointed rosettes; beyond it, again, is a plain band ornamented at the four angles by two bosses. The idea of these buttons must have been suggested by large-headed nails, which served to fix plates of ivory, crystal, or glass to pieces of furniture.

Plates, designed to be fastened on to the robe, are of all conceivable shapes; some are triangular, and enriched with complicated scrolls (Fig. 537); others are quadrangular, and exhibit flowers which vaguely recall certain species of lilies

Fig. 539.—Ear-ring from Tomb III. Actual size.

(Fig. 538). Let us not forget the gorgeous gold pectoral from the fifth grave (Fig. 108), showing an ornament already found at Troy (Fig. 512, 5). It consists of a small tube, through which was passed a string, with spirals on either side, made with thin gold wire (tail-piece, Chap. XI.). Spirals form the ornament of large gold ear-rings (Fig. 539). Some still preserved the little ring which passed through the lobe of the ear. Hair-pins were no less elaborately designed. It will be enough to cite the specimen, with a semi-circular frame, within which is a woman with outstretched arms.²

The graves of the lower city were intended for people of no great importance; so that the ornaments they yield cannot compare, in size or weight, with those of the royal tombs. The most prevalent designs on these small ornaments are those seen on glass-pastes (Fig. 540). Such would be a sphinx with floating

¹ SCHLIEMANN, Mycence.

² Ibid. A better drawing appears in Jahrbuch, 1892.

plumes, as like to that figured on a glass-paste from Spata as it is possible to imagine (Fig. 411); or a couple of argonauts, separated by a granulated flower, and set face to face (tail-piece, end of list of plates). So too, at Vaphio, we find rings and signets surrounded by a cable or twist of gold wire. In the latter was sometimes inserted an intaglio, sometimes a number of pieces of glass held in tiny compartments. Again, rock-crystals or pastes filled round cavities which pervaded the surface of a gold ball, having a hole right through the middle. It must have been the central piece of a necklet. A second ball is covered with dots, like the husk of a horse-chestnut, and there is an instance of a disc with bosses similar to those of the diadems (Fig. 540).





Fig. 540.—Gold rings and ornaments.

Rosettes are plentiful. In a word, we have here the same forms as those which the royal tombs have revealed to the world. It would appear, however, that towards the end of the period, the metal-worker was led to choose simpler and lighter designs. Glass-ware begins to play a more prominent part in the ornaments; these, whilst preserving their former gorgeous aspect, are now of less intrinsic value.¹

Among the ornaments found near the corpses, some are far too flimsy to have been worn in life. Such would be gold leaves covering leg and thigh (Fig. 106), or gold bands doing duty

¹ Relating to hair-pins, with a silver or bronze stem, see Έφημερίς, 1889. The same remark applies to gold and silver objects, found in small quantities in the graves at Palamidi.

as baldrics,1 as well as many a bracelet, ear-ring, and such-like The Mycenians, then, were already accustomed to prepare what might be called sepulchral ornaments.2 pieces, on the contrary, such as diadems, semi-ovals, or pendants, and many more, are sufficiently massive to have stood the wear and tear of a long life, ere they were buried with their owner. Many of these ornaments are much worn. We are not a little surprised to find that the Trojan goldsmith knew how to solder gold upon gold; that, unlike his modern colleague, he did not employ either a silver, borax, or glass alloy, which always leaves an unsightly dark mark at the point of junction, but that he managed his soldering in such a way as to be unperceptible to the naked eye.3 The process, however, was unknown to the artisans who executed the gold objects contained in the tombs situated on the acropolis. Thus, whilst the handles of a vase from Troy (Fig. 504) are soldered, nails, big and small, are invariably used at Mycenæ for the same purpose. The art of soldering was either imported into Hellas, or re-discovered about the time when the bee-hive tombs were built. Thus, the vertical stem of the Vaphio vases, which serves to connect the horizontal bands of the handle with one another, is soldered Soldered, too, are other gold ornaments of the on to this. same epoch (Fig. 540).4 When the two metals, silver and gold, are introduced into one piece, they are either hammered together and nailed one upon the other, or incrusted (Fig. 524), gold laminæ being inserted in small cavities cut for the purpose in the silver plate (Fig. 374). It would appear that in early days the Mycenæ metal-worker found some difficulty in carrying out the process just described; for Schliemann discovered a thin leaf of copper between the silver and gold plates constituting a long-horned ox-head.5 Nor had they any knowledge of what we call gilding, or how to solder copper and bronze. Vases made of these metals are composed of plates joined together with countless nails. As to the handles, they are always fastened to the body with broad-headed nails.6

The charming process of incrustation, which was fully described by us in dealing with the Mycenæ daggers and a vase

¹ SCHLIEMANN, Mycenæ.

³ SCHLIEMANN, Ilios.

⁵ Schliemann, Mycenæ.

² TSOUNDAS, Μυκήναι.

^{4 &#}x27;Εφημερίς, 1889.

⁶ Ibid.

from the lower city (Fig. 374), seems to have found great favour with the native goldsmith (Pls. XVII.-XIX.). To the products of this art may be added a silver bowl from which M. Koumanoudis removed a thick layer of oxide with which it was covered when exhumed from the Mycenian acropolis. A curious design, a box out of which emerge leafy branches, is represented on the body three times over. Running round the cup, below the image, is a ring of small inlaid discs or round plates.¹ This style of work

14 1G. 541. - Broken sword. Actual size.

is also represented at Vaphio by a dagger-blade of bronze,² and a broken sword at Thera (Fig. 541). The two faces of the blade are inlaid with diminutive gold axes, which detach themselves from the green patina overlaying the surface.³

¹ U. Köhler, Mykenischer Silbergefasse.

² 'Εφημερίς, 1889.

³ WORSAAE, Des âges de pierre et de bronze dans l'ancien et le nouveau monde, Pl. VIII, coloured.

The foregoing examples show how great was the variety of the materials used by the goldsmith, and how cleverly he managed to obtain harmonies and contrasts of colour. He seems to have possessed scales. That he knew how to compose different alloys is incidentally proved by a copper blade from Vaphio, which still preserves one of its bronze crustæ; chemical analysis has shown that this contains a very large amount of tin, or an alloy compounded with silver and lead. In this way was obtained a soft white metal, which must be the Homeric κασσίτερος. Until the discovery of tin mines in Spain, the metal was imported in much too insignificant quantities to have been used pure.

Along with metals and glass, the goldsmith showed a decided partiality for semi-precious stones. Several large balls of rock-crystal, used perhaps as sceptre-pommels,³ and thin plates of varying shapes, intended no doubt to be utilized as inlays, have been brought out of the graves, thus showing that the article was in high demand.

Weapons and Tools.

Archaic Greece knew of but two kinds of arms, stone arms, and weapons made of bronze. As time went on, the latter replaced the former; nevertheless, even when the metal-wealth of Mycenæ was exceedingly great, she did not give up the older and familiar weapon, and arrows continued to be furnished with points of obsidian (Fig. 2), although long before that weapons used in a hand-to-hand fight had been of bronze.

Between the point when metal makes its appearance, and that when it invents forms of its own, there is a transition period, during which the shapes proper to stone are imitated. This period is represented at Troy by bronze axes that are but copies of stone ones.⁴ The first step onward is made by arrowheads, apparently fixed by a nail into a notch cut in the wood, and unprovided, therefore, with a socket.⁵ The rough edges seen here are perhaps reminiscent of the flint points of yore.

¹ SCHLIEMANN, Mycenæ; 'Εφημερίς, 1889.

² Έφημερίς, 1889. The alloy in question has not yet been analyzed.

³ SCHLIEMANN, Mycence.

⁴ SCHLIEMANN, Ilios.

⁵ Ibid.

Advance is still more marked in the daggers; with them imitation has totally disappeared. The better class were supplied with bone or ivory handles (Figs. 368, 502), and the most common with a wooden mount. There are no swords in the beginning of the period, whether on continental Hellas, or in the oldest

Fig. 542.—Bronze sword. Length, 65 c.

graves of the Cyclades and Cyprus.¹ The lances and daggers approach very nearly those that have been dug up at Troy.

Swords are double-edged, and make their appearance at Mycenæ.² One was brought out of the ruins of a house situated north-east of the Lions Gate (Fig. 542).³ The blade, which is in good condition, in length from eighty to ninety centimetres,

SCHEIEMANN, Mycenic.
 ΓΕφημερίς, 1891.

has a vertical rib down the middle. The broad guard terminating the handle was an admirable protection for the hand; in it are holes for the nails, which served to fix it to the blade. To judge from the objects found in the grave, this sword appears to belong to the end of the Mycenian period, and would thus represent its

Fig. 543. -- Spear-head. Length, 293 c.

last phase. The Thera specimen, with its elegant decoration, cannot be much older.¹ The Mycenæ spear, like the lance of the Homeric heroes (Fig. 543), is provided with a socket, into which was fixed the shaft. As to daggers, quite a goodly crop

¹ For fuller details upon the bronze swords in question, see UNDSET, Die ältesten Schwertformen.

has reached us from the graves on the acropolis; of these the finest examples are given in Pls. XVII. to XIX. They also occur in the lower city of Vaphio. The Mycenæ axe is sometimes single, sometimes double-edged, with a hole in the middle for the handle. A curious specimen from Vaphio is crescent-shaped; it is represented on an intaglio, where it is carried by a long-robed personage, perhaps a sacrificial priest (Fig. 424, 4). The two large holes with which the crescent is pierced serve to explain a passage in the *Odyssey* that had long baffled the ingenuity of commentators. It enables us to grasp why Ulysses' arrow sped right through a dozen or so of axes set in a line

F16. 544.—Bronze axe. Height, 145 c

in the courtyard of the palace. They were similar to the one we print above (Fig. 544).

No remains of defensive armour have been found at Troy, Cyprus, or the Cyclades. A gold plate, with a lion's head engraved on it, which Schliemann mistook for a funereal mask, has been identified as the central ornament of a shield.⁶ The edge of the plate still preserves the holes for the nails that served to fix it to a wooden board; as an emblematic and decorative

¹ Schliemann, Mycene. ² Ibid.

³ A Lydian ornament is similarly shaped (History of Art).

⁴ Odyssey.

⁵ The connection between the two sets of axes has been pointed out by C. BELGER, Berl. phil. Wochenschrift, 1890.

⁶ SCHLIEMANN, Mycenic.

figure, it served its purpose admirably. The Mycenian shield is figured on scores of monuments, now in the shape of a semicylinder, covering the entire body (Pl. XVIII., Figs. 414, 416), now of a sphere curved in at the sides (Pl. XVIII., Figs. 418, 426). Its dimension is somewhat less on a Mycenæ vase (Fig. 488), where it is carried by warriors, apparently protected by breast-plates, which no doubt consisted of several folds of cloth. A bit of coarse stuff found in Tomb V. presumably belonged to a breast-plate of this nature. It had stuck to a hilt in very poor condition, but which still preserved three enormously large-headed nails. The helmets seen on bronzes and ivories are always very simply shaped (Figs. 349-351, 358, 359, 373), but more elaborate on an intaglio (Fig. 421, 6), and on a vase from Mycenæ (Fig. 488); there it is furnished with horn-like appendages.

On the stelæ are represented war-chariots in very rudimentary fashion (Fig. 360). They are better drawn on the intaglios (Pl. XVI. 9, and Fig. 413), but so small that all we can make out are the two wheels, the very diminutive box, and the long shaft which parts the horses.² To attempt enumerating one by one, or figuring the thousand and one instruments and tools that have been collected in the course of the excavations, is altogether out of the question. The destination of some of them is not clear. Such would be those huge bronze spoons furnished with a socket,³ and used perhaps to remove ashes and live coals from the sacrificial altar, or as a kind of frying-pan for toasting the sacred barley, etc. A second find gives us another big spoon of bronze,⁴ and a number of small silver ones; of these, one is shaped like a cyathus.

Keys were certainly known at Mycenæ, since one has been found at Troy. The specimens, however, which Schliemann collected at Hissarlik were not from the graves, and as several of them are iron, they cannot be placed in the epoch under consideration.⁵ Finally, it is hard to assign a probable destination to tiny bronze wheels which were found with the keys just referred to. Schliemann had quite a collection of stave-pommels, made of

¹ Upon the use of linen breast-plates, see Prof. Studniczka's observations in Athenische Mittheilungen.

² SCHLIEMANN, Mycenæ.

^{3 &#}x27;Εφημερίς, 1889.

ivory, rock-crystal, or metal; either rounded off into a ball, or decorated with serpents' heads. They were held in the hand by kings, those sceptre-bearers (σκηπτοῦχοι) mentioned by Homer.¹ Wind and string instruments are found in a fragmentary condition at Troy and Mycenæ, and are also represented in sculpture (Figs. 353, 354).² To these may be added profusely decorated combs and mirrors (Figs. 280, 379-381), and razors, of which four are to hand.³

Dress.

In the course of this study we have so often had occasion to describe the costume of the folk represented by sculpture, that all we propose to do in this place is to define the general character of the apparel affected by either sex.

Generally the men, notably in scenes of battle and the chase, are depicted with drawers that reach to about the middle of the thigh, and are drawn in at the waist. Now and again the artist has neglected to indicate this article of dress, and his figures look quite naked (Fig. 358). Drawers had one great advantage: they allowed the body perfect freedom of movement. That they were found all too cool in winter, and a sheep's-skin or cloak made of some coarse thick material was worn over them, may be safely inferred from a cape of this description covering the men who watch the fight which is raging outside a beleaguered city (Fig. The feet were protected by sandals, and the legs covered with leggings, both of which were fastened with many thongs. The hair was worn long, and bound with a leather band to prevent its falling over the eyes. Such was the primitive costume, and in despite of its drawbacks in a country which cannot boast of an even temperature, many generations were satisfied with it. The tunic affected by the soldiers represented on a Mycenæ vase (Fig. 488) was an enormous improvement on this. The representation of a tunic was perhaps intended on a monument of much earlier date (Fig. 358, at the bottom, to the right). Its Greek .

¹ Schliemann, Mycenæ.

² Schliemann, Ilios.

³ Tsoundas, Μυκῆναι.

name χιτών is derived from the Semitic word ketonet, cotton, tunic; and points to Syria as the place of its birth.

When kings and nobles wished to show themselves with the pomp befitting their rank, they did not confine their costume to a tunic that left the limbs exposed from the knee; but seem to have been clad in long trailing robes resplendent with plates of metal. That this state dress folded them in death and in life is gathered from a number of monuments where it is distinctly indicated (Pl. XVI. 16, Fig. 424, 4). Swords and sceptres with elaborate decorations completed a costume towards which the weaver had furnished his most gorgeous textiles and the jeweller his most exquisite ornaments. Youthful humanity showed a marked predilection for rich display in the matter of jewellery. the body at Vaphio-which, to judge from the weapons buried with it, must have been a man—were found rings for the fingers, bracelets, and necklaces. Rings of every description have been picked up in the graves, showing that the fingers were loaded with them. In this refined display of luxury, however, there remains something of the tastes and habits of the savage.

The women's costume, necessarily more elaborate than that of the men, cannot be as easily restored on the authority of monuments either inexpressibly rude in style or of very small dimension. Old marble idols represent a nude goddess (Figs. 327-330). But at Mycenæ, as far back as the shaft-graves, women are invariably draped from crown to toe. If on certain monuments the bosom seems to be uncovered, it is because on the one hand the bodice is tight-fitting and void of ornament, so that it marries every detail of the form and is thus apt to mislead, and on the other because of the small dimension of the image; coupled with the fact that the engraver was more concerned to bring out the roundness of the bosom beneath the stuff than to make the drapery visible; but it is plainly indicated on not a few monuments (Fig. 433). The skirt, on the other hand, is always full, beflounced to the ground by bands of a different colour. Were the bodice and the skirt of the dress made in two separate pieces, as some at first surmised? The primitive dress of women among these semi-barbarous populations, they contended, was no more than a piece of cloth folded round the middle, which with the passage of time grew longer and descended to the ankle. The bodice, however, was an after-thought, added on when these societies began to shake off somewhat of their primitive rudeness. The conjecture is not unreasonable; nevertheless, it seems more probable that the garment depicted on our monuments is a tunic. Women, as soon as the sense of modesty awoke in them, no doubt led the way in adopting so convenient a mode of dress; but in cutting it up with tucks and flounces they invested it with a character it had not before.

The tunic was gathered in at the waist by a girdle made of a piece of cloth, leather, or metal.¹ To judge from one or two images (Fig. 419, 14), the dress was fastened in front by means of buttons. This view of the case would account for the prodigious quantity of stone buttons that have been brought out of the graves. Tunics enriched with bands of many colours were only for the well-to-do, or at most kept for festive occasions. Every-day garments, and those worn by slaves, were of course void of any such embellishments. The woman portrayed on an oft-cited vase, who witnesses the soldiers marching to the front, is clad in a trailing tunic, but without ornament (Fig. 488).

The tight-fitting bodice and full skirt of this period did not admit of being held together with mere pins, like the true Greek costume; this is always seamless, and composed of a rectangular piece of cloth draped about the figure, the ends of the stuff being fastened on the shoulder and at the side by means of clasps, brooches, or hooks. The principle on which the two costumes are constructed is widely opposed, and the result is a very different effect. The use of the needle made fibulæ superfluous. Hence these are absent both at Troy, in Cyprus, the Cyclades, and the shaft-graves of Mycenæ; but they appear in the tombs of the lower city as well as at Vaphio, where specimens exhibiting two or three forms, but quite simple, have been picked up (Fig. 253). It is not unlikely that even when the practice of wearing fibulæ became fairly general, their use was confined for a long time to fasten the men's chlana and the female himation on the shoulders; a cloak unrepresented on the monuments, but the need of which must have been sorely felt in the winter months.

If men were bejewelled, women were so to a much larger extent. A couple of tombs which only contained women, and a third wherein men and women were buried, have supplied gold ornaments in greater abundance than any other sepulture. The

¹ TSOUNDAS, Mukfirai.

subject is by no means exhausted, for our task has confined itself to pointing out the principal types of ornaments discovered in these and similar graves. We will add one word more. Ear-rings in comparison with other ornaments, are exceedingly rare. M. Tsoundas knows of but one monument on which something like it seems to have been intended (Fig. 379).

CHAPTER XII.

GENERAL CHARACTERISTICS, DATE, AND DIVISIONS OF THE MYCENIAN PERIOD.

WE have now passed in review the main discoveries that for the last twenty years have widened the canvas of the Homeric epoch, broken down the barrier that formerly checked the further progress of scientific research, and given it a background. before the excavations which Schliemann carried on at Mycenæ had burst upon the world with somewhat of a theatrical effect, we ought to have suspected that a community in the midst of which the Epos had had its being, implied for it a long past not barren of results. Time alone, and a long time to boot, is required to transform, in the popular fancy, average humanity into heroes of supernatural stature, moral and physical, such as poetry attributes to them. The people whom the bards eulogized under the names of Agamemnon, Menelaus, Achylles, and Diomedes were men of old, not their contemporaries. a war wherein all the Grecian forces from the continent and the isles are brought together against a powerful Asiatic city, the expeditions that led the heroes in and out of the islands until the shores of Egypt were reached, must body forth what the mythic cycle remembered, more or less modified by local tradition, of distant military campaigns, displacements and adventures of armed bands, that once had been impelled by their restless disposition to turn the coasts of the Mediterranean into their hunting-ground. It was in the course of these wanderings and migrations that the Achæan heroes, the offspring of the gods, gained for themselves a fame the faint echo of which is heard in Homer's verse.

poet extols the wealth of Orchomenos and Mycenæ. No better opportunity than this could be found for inquiring whence had originated treasures whose splendour and bulk fairly dazzled the imagination of the singer? Remembering the Achæans' mode of life, we may be sure that war and brigandage were one of its main sources. The leaders of those Minyi who had first crossed the Hellespont in quest of the Golden Fleece, the Pelopidæ who had come from Asia Minor and extended their dominion over Peloponnesus and the adjacent islands, were Vikings every man of them. War and pillage, however, are inadequate to found a lasting prosperity. As regards Orchomenos, its good fortune was due no doubt to the vast and fruitful plain of Bœotia, and the artificial drainage of Lake Copaïs. It is the same with Argolis. The oldest myths represented it as the first Grecian land ever visited by Oriental vessels, and in consequence of it the first to be initiated in the usages of polite life. Even before Schliemann's spade had exhumed shimmering gold from the shaftgraves, we might have safely inferred that agricultural and industrial development had been early in the champaigns' surrounding that spacious and safe roadstead turned towards the morning sun. A dense population, alone in possession of the plain and the side valleys abutting thereto, could furnish as many hands as were needful to quarry and set up the materials for building the colossal ramparts and strong castles of the native chieftains. Taking into consideration the depth of these walls, and the technical skill required to erect the constructions that have been described, the historian, unless he deliberately refuses the testimony of his own senses, will allow a larger measure of credence to the Argian cycle of myths than has been generally accorded thereto; the information it contains will disclose to him a civilization contemporary with the Perseidæ and the Pelopidæ, whose glory was sung by pre-Homeric bards.

All that was known of this culture were its buildings, and its sculpture was represented by the Mycenæ lions alone. No prospect looked more hopeless than that we should ever be able to define the characteristics of its industry and its arts. descriptive portions of the Epic referred to a different period in the evolution of the Greek mind; moreover, like all descriptions that cannot be confronted with the objects themselves, they left many points obscure and uncertain. Nobody dreamt that we should light upon products of plastic art manufactured in Homer's time. With their help we can now creep back far beyond the boundary line that until lately was dimly perceived in the unapproachable distance. The excavations have brought to our knowledge a culture very much older than that of Ionia, where the marvellous Epic had its being and flourished; they have disclosed an art that had run its course when the Dorian invasion swept over the country.

What most strikes the historian who sets about to define pre-Homeric culture, is its having been a stranger to writing. It knows neither of the ideographic signs which Egypt and Chaldæa possessed, nor of that alphabet which Greece will borrow somewhat later of Phœnicia. Certain characters seen on Trojan fusaïoles have indeed been identified with those of the Cypriote syllabary; but many of these so-termed inscriptions, which some think they can decipher and read fluently, are but patterns or rude scratchings traced by an otiose graver. On the other hand, the few signs that admit of being recognized as this or that letter of the Cypriote alphabet, without offending reasonable probability, appear to have come from the upper layers of rubbish.¹

Attention has been recently called to facts of the like nature that have taken place on continental Greece. On the handle or body of vases from Mycenæ, Menidi, and other localities, are incised strokes closely resembling, it is assumed, now Greek letters, now characters of the Asianic alphabet, itself derived from the Hittite system of ideographs, and preserved in the Cypriote script.2 The analogy between some sets of strokes is marked enough; but such letters, if they are letters, occur in groups of two or three, never more, and do not appear to form words. They may, after all, be nothing more than potters' or trade marks, and the would-be resemblances purely fortuitous. The following hypothesis has also been proposed. Native artisans may have beheld on some Phoenician or Hittite ware letters that belonged to one or other of the systems of signs then current in Syria and Asia Minor, and reproduced them as a novel and quaint decoration, although totally unconscious of their value.3 Until further notice, we shall continue to affirm that throughout

¹ History of Art.

² Ibid.

³ Tsoundas has published several of these so-called characters (Μυκήναι; Πρακτικά, 1889). See also Δελτίον, 1892.

the whole of this period naught with a semblance to any kind of script has been seen in Peloponnesus, Central Greece, or on the thousand and one objects found in the tombs, which were designed for domestic or ornamental uses.

This culture, then, is a dumb culture, so that the voice of its authors will never fall directly on our ear. The collections that have been formed by Schliemann and his compeers give no answer to a question bearing on the monuments they have unearthed, namely: To what race belonged the clans that built the Tirynthian and Mycenian walls, and what language did they speak? Were those enormous blocks piled up by the Semite, or was it the Phrygians who erected those tall, rounded cupolas, and concealed them beneath a thick bed of earth? Are we to consider the architectural and decorative skill seen here as due to clans of whom Thucydides relates that, "to judge from the weapons buried in old graves found in Delos, they must have belonged to the Carians"? Or else, with due acknowledgment for the share which colonizing groups from Asia Minor, Syria, and even Egypt had in the movement and advance of civilization, should we not rather see Pelasgi, Æolians, Ionians, and Achæans —in a word, the direct ancestors of the Hellenes of the Epic and history, in the authors of these stupendous structures and products of human industry which the graves have given back to us? The problem cannot be solved with the help and authority of plastic art. All we can say is, that in such pictures where, owing to the dimension and style of the work, the image can be clearly seen, we find what is called the "Greek profile." Yet plastic art, though inadequate to settle the question, seems to favour the notion that would make the Hellenes of the classic age the direct descendants of the creators of the Mycenian civilization.

Such a hypothesis assumes a much greater degree of probability the moment we read and inwardly digest the Epic poems by the light of recent discoveries. The *Iliad* is called a historical poem because, like the *Song of Roland*, it embodies certain facts that for want of a better name may be called history, although veiled and hidden away under the rich and marvellous web interwoven by the brilliant fancy of the poet. There is perfect correspondence between the information derived from the Epic on the one hand, and on the other with the result of recent discoveries. That past whose after-glow is reflected in the

Homeric "tales," is characterized by features that recur in the pre-Homeric world, a world which, at the voice of Schliemann, awoke and came out of the grave where it had so long lain asleep.

The most curious fact about Schliemann's excavations is that they invariably confirm the power and splendour of every great city mentioned in the Iliad; where, too, the eye of the modern traveller was attracted by stupendous and imposing remains of an architecture to which the Hellenes themselves ascribed a high antiquity. From the sub-soil of these structures, products of the most varied kind have revealed a style and industry unknown to the world up to that time. That piece of coast in the north-west corner of Asia Minor coincides far better than any other ancient site with the topographic data to be gleaned in the Iliad. Here have been exhumed the massive walls of a fortified village, the house foundations, tools, and weapons of its former inhabitants. Although the circuit-wall enclosed an area of no great extent, its commanding position over the surrounding plain and the entrance to the Hellespont made it a place of paramount importance. Hence we may safely infer its having been a frequented mart, and the head-centre of folk that had grown rich by husbandry, traffic, and piracy, a stronghold where their hereditary chiefs defied the enemy whose reprisals they had justly provoked. In it we may boldly recognize Homeric Troy.

One can easily grasp that conflicting interests should have led to sharp contests between a city holding the key of the Straits and the tribes of Eastern Hellas, whose coasting trade was constantly menaced by Trojan pirates. According to Homer, the commander-in-chief of the host which sacked Troy is Agamemnon, King of Mycenæ, the head of an influential house, who, jointly with Menelaus, also holds sway over Laconia. And in his capital, Mycenæ, and its nearest neighbour Tiryns, are found the most impressive of those erections held by the Greeks to have been raised by the Cyclopes. Thence, too, has come a greater abundance of artistic and industrial products, to describe which the terms of "Mycenian civilization" and "Mycenian art" have been found. Modern research, then, is agreed with Homer when the latter assigns a pre-eminent position to Mycenæ, and calls it a city abounding in gold (πολύχρυσος Μυκήνη); for of no

other site can it be said that the precious metal was handled with the shovel.

Orchomenos is another place that has borne as great a name for its wealth of gold as Troy and Mycenæ. Achylles, in his answer to the Greek envoys, declares that he will rather have his revenge than "hold in his grasp all the treasures of Orchomenos and of Egyptian Thebes, cities wherein houses are brimful of gold." The spade, at Orchomenos, has not so far brought shining gold from the depths of its soil; but the tomb said by Pausanias to be as noteworthy as the Egyptian pyramids, deserves the epithets which Homer applies to it. Its dimensions are nearly those of the Treasury of Atreus; and though in a ruinous condition, it still preserves noble remains of its old decoration.

Homer shows us Menelaus, also a prince of the house of Pelops, as established in "hollow Lacedemon"; and in the valleys of Taygetus and the plain of Sparta have been uncovered tombs precisely similar to the domed-buildings of Argolis and Bœotia. From the Vaphio grave, close to the Achæan towns of Pharis and Amyclæ, where no doubt Menelaus resided, have come those beautiful gold cups wherein Mycenian sculpture has said its last say. Tombs of this class, with their usual furniture, occur in Thessaly, around the Pagasæan and Malian Gulfs, on the border of Achylles' dominions, whence the ships of the Minyi were wont to start on their distant expeditions. Several more of the highest interest, with their furniture intact, have been unearthed in Attica, where tradition places Pelasgi and Ionians as domesticated there at an early date. Had the fortresses of Mycenæ, Tiryns, and Orchomenos been in the grasp of foreign conquerors, had the singers not been authorized by unbroken tradition to honour the glorious heroes of their race in those "sons of the Achæans" whose exploits they extolled to the skies, would the Epos, every line of which is palpitating with racial pride, have trumpeted abroad the adventures of the Argonauts and of the vanquishers of Troy? If the auditors were never weary of listening to the tales of the poets, was not this because they were conscious of the link that connected the present with a past out of which such images as were deeply graven in men's memory had survived of a time when history, the daughter of writing, was not yet in existence?

How many years may have elapsed between the time when VOL. II.

this civilization flourished—now only known to us by its plastic art—and that when Epic poetry acquired its most perfect form among the Asiatic Hellenes, it would be hard to say. This much is certain, that in the space intervening between the two points there is room for many successive generations. Some facts, from among many more, may be adduced to prove that the interval in question, though not admitting of accurate measurement, was certainly a very long one.

The tribes of the Mycenian age bury their dead; but the only mode of sepulture known to the contemporaries of Homer is incineration. The passage from the earlier to the later rite implies a notable change in the beliefs relating to a life beyond the grave. So long as this posthumous life is conceived as the prolongation, more or less imperfect and uncertain, of that which man leads in the light of day, the survivors' first duty is to protect the corpse against the chances of destruction that threaten it. The notion of consigning the body to the flames did not originate in the mind of man until another conception came, if not to replace, at any rate to superimpose itself to the older one, whose hold on the masses was almost as deeply rooted as ever. At first the new superstition was shadowy and ill-defined; envisaged as an image, a something which the body exhaled with its last breath. This image or είδωλον, as Homer has it, was supposed to pursue somewhere, in a gloomy and distant region, a colourless and joyless life. Greek thought will devote its highest energy in trying to expand and develop this conception to the utmost; its supreme effort will culminate in devising punishments in another world for the evildoer and rewards for the good, so as to satisfy justice and sanction Intelligence had not matured so far when the eleventh chant of the older Epic, which contains the account of Odysseus' visit to the nether world, was composed; in it allusions to the future consequences, promulgated by the new belief, are both rare and obscure; the creed, though in a rudimentary form, has become the prevailing system of the later Epic, and by itself proves that rational reflection had made enormous strides since the infantile days when another superstition had been the rule. Changes in matters pertaining to religious dogmas are among the slowest to be effected in any community. Centuries must have elapsed, therefore, ere men could be persuaded to relinquish the earlier rite, and accept the later version of the eternal mystery which surrounds the

grave. Nor is industrial progress, though more rapid, accomplished in a day; especially at an early date, when the materials are exceedingly few, and the processes employed in their manufacture of the simplest. The use of iron is unknown to Mycenian culture; and it only makes its appearance, in some rare instances, towards the end of the period. With the people whose every-day life is reflected in the Iliad, iron may not yet be as common as bronze, but is none the less on the high-road to it.

Tiryns and Mycenæ have supplied us with a surprisingly small number of brooches or fibulæ; 1 but they are mentioned again and again in Homer. Garments at Tiryns and Mycenæ were sewn together; the contemporaries of the poet, however, not unfrequently fasten theirs by means of clasps. This fashion will grow apace, and when it has become general, will serve to distinguish the Greek costume from that of the Asiatics. These examples suffice to show that the poet and his auditors are separated from the heroes by a considerable number of years. Opinions may not be agreed as to their precise number, but we think we have proved that the poems take for granted the knowledge of an older state of affairs in a world which had its centre in the Ægean, a knowledge necessarily scanty and reducible to a few facts, yet of inestimable value, and exact as far as it goes. The facts in question call up to the mind the remembrance of royal cities uncovered on the very spots to which the poet pointed with raised finger. They show in a convincing manner the unbroken continuity between these two communities: that which has handed down to us the products of its manual labour, and that which has enriched us with two immortal poems. What we find in Homer of historical import is connected with the heroes and their adventures, and has been gleaned from traditions which preserved the remembrance of the princes who had held sway at Tirvns, Mycenæ, Amyclæ, Cnosus, Ialysos, and Orchomenos. The palaces and tombs of these princes have lately been and are even now brought to the light of day. Princes and subjects were already Greek, even in tongue; but the dialectical peculiarities of the language they spoke will ever remain a sealed book to us, and if discovered, would not unlikely tax the ingenuity of our most accomplished Hellenists.

¹ TSOUNDAS, Μυκήναι, p. 57; UNDSET, Sur les plus anciens types de fibules et les fibules de provenance grecque; and S. REINACH, L'Anthropologie.

The Epic poems, then, have their roots in popular lays of very ancient date; they were taken from Europe to Asia by Æolian and Ionian refugees, who, driven from their homes by the Dorian invasion, struck out once more for the eastern shores of the Ægean under the lead of young chieftains. This view of the case takes us back to the beginnings of the Epic song and of Mycenian Greece; it enables us to grasp why it comes about that all the poems should belong to European Hellas and the adjacent isles, and why the Iliad and the Odyssey contain elements of very different date. We should keep this well in sight when we turn to the Homeric tales for information likely to throw some light on the state and habits of the earlier communities. If, in our survey of the principal monuments of the prehistoric period, we have laid special stress upon such artistic products as belong to Tiryns, Mycenæ, and Amyclæ, it is because they represent Mycenian civilization in its mature state, when it was able to dispose of all its means of expression. preference shown by the historian to a restricted number of works, nearly all from a small district of Hellas, by no means implies that the area upon which that civilization extended was confined within the boundaries of Peloponnesus, or even of continental Hellas. We cannot say on what spot the mother-tribes of the Hellenes first awoke to spiritual life. Let us remember, however, that the products of their nascent manufacture have been exhumed as well on the north-west coast of Asia Minor, as in the isles of the Archipelago and Europe.

Hence some have proposed to call this industry "Ægean" in place of "Mycenian." The name has this in its favour, that it would indicate the real limits of its domain. If we have kept to the second term, it is because it was already consecrated by usage, and had besides the merit of reminding one of such monuments of this art as are best calculated, from an artistic standpoint, to convey a just notion of its power. Whether this civilization be named Mycenian or Ægean is of small import. What has been established is the fact that it represents the general condition of the Greek world whose beginnings we can neither gauge nor fix, but which went on without a break for several centuries. Henceforward the Grecian world had to a certain extent its unity, a spiritual and æsthetic unity, the only one it was fated to work out for itself. Long before the

Homeric Epic became the common property of every human being who understands the Greek language, native industry was employing everywhere, more or less successfully, the same processes and the same decorative scheme. The industries, manufactures, and arts that had their seats in the principal centres of this creative activity are not the same throughout in kind or form. Thus, the monuments of one place exhibit a technique of which there is no trace in those of another, and the ornaments that prevail in certain localities fail altogether elsewhere. Yet, if there are differences between the single instances of this art, resemblances are sensibly greater. In the chronological series that one is necessarily led to form, each group of monuments is allied to the preceding one by features which establish a close connection between the two sets, and all the groups, even those that appear at vast distances from each other, are distinguished by certain characteristics common to all, and distinct from those that bear the impress of Oriental art and those whereon classic culture has put its own mark.

The first idea of scholars who tried to class in chronological order the monuments under consideration was to head their list with the prehistoric houses discovered at Thera under a thick bed of ashes and pumice. The Hellenes were aware that the island had been colonized from Laconia and Phœnicia; the information enabled them to mount back to the fifteenth century B.C.; but they had preserved no remembrance of that stupendous catastrophe. How natural the conclusion that the oldest remains of human labour likely to be found in that country were the buildings so recently unearthed! The induction, however, has been falsified by the result of the excavations. These have shown that in many things the civilization of Thera is higher than that of Troy, and that the oldest seat of Ægean industry should be sought in the first and second village excavated by Schliemann on Mount The style of building is elementary and rude in both Hissarlik. places. At Troy, however, the only facing which appears on the structures consists of a somewhat finer clay than that which serves as mortar; at Thera, on the contrary, we find a coloured and ornamented plaster lining. Again, Troy shows no sign or token of the brush having been used there. The pottery, like that of the oldest Tirynthian village, is entirely monochrome. This, too, is prevalent at Thera, but along with it are found

vases on which plants and animals have been traced with the brush.

If the industry of Thera is in advance of that of Troy, it lags behind that of Mycenæ and Tiryns. Thus, at Mycenæ the domestication of metal has become general, but at Thera and Troy we have nothing but stone implements. There is no doubt a certain affinity between the forms and shapes of Mycenian and Tirynthian ceramics; but the latter are inferior in every respect to those of its neighbour. Thera therefore, from a cultured point of view, stands mid-way between Troy and Mycenæ. The material of the industrial products of several other islands of the Archipelago, Oliaros, Amorgos, Melos-all in close proximity to Paros -largely consists of marble, which is found everywhere on the soil surface. Out of marble are made small figures which may be considered as the far-off ancestors of Greek statues; as well as vases intended for utilitarian or ornamental purposes. cotta statuettes and rudimentary pottery are not unknown. The inceptive efforts of the ceramist were directed towards incised figures, but he next learnt how to use the brush; the vases, utensils, and ornaments from the island-graves bear the impress of the Mycenian style, but at a distance, for they neither exhibit the variety nor the rich effect beheld on the similar objects that reach us from continental Greece. The necropoles of Rhodes, of the adjacent islands, and of Crete belong to a much later period, so that the vases which have been brought out of them are characterized by exactly the same shapes and forms as the pottery from Mycenæ and Tirvns. We are thus led to raise the question whether the style under notice is not island-born, and whether its favourite types, sometimes comprised under the denomination of "floral and maritime decoration," had not there its being.

This view of the case would considerably detract from the inventive faculty ascribed in the first instance to the Mycenian artisans; in that it would place elsewhere the seat of their ornamental scheme, more especially perhaps in the island of Crete, to which the oldest traditions assign the part of "Queen of the Isles." Thence the shapes and designs peculiar to this art would have passed to continental Greece, which at that time was ruled over by great Achæan and Minyan chieftains. These provided the artisan with more precious metals and fine materials than

Hellas had yet known; with them were built and decorated vaster and more sumptuous edifices than any she had seen up to that time, whilst the large dealings her native princes entertained with the stranger facilitated the import of all the products of the latter.

The palmy days of this culture coincide, very likely, with the reign of the Pelopidæ, the Æacidæ, and the Nelidæ. places Agamemnon, a grandson of Pelops, above all his fellows, it is because the remembrance of this prince and of his house was bound up with the most brilliant phase in the existence of the Mycenian kingdom. Pausanias only went half wrong when he identified the corbelled domes of Mycenæ with "the subterranean buildings in which Atreus and his sons kept their treasures"; had he said "tombs wherein they were buried," he would have been quite correct. Accordingly, it was under the influence of the Pelopidæ that those cupolas, so well calculated to show off the skill of the architect and the mason, were erected. The Tirynthian and Mycenian palaces, certain portions of the rampart of the latter, such as the Lions Gate and the walls surrounding it, as well as the graves of the lower city, would date from the same epoch. Out of the three handles for mirrors, apparently executed by the same hand, two came from a Mycenæ domed-tomb, and the third from a bee-hive grave (Figs. 379-381). The remark applies to such metal vases and intaglios as are distinguished by greater freedom and truth of design. But for the fear of drawing upon oneself some of the ridicule which was meted out in no stinted measure to Schliemann, one might be tempted to say after him that Menelaus and Helen drank out of the Amyclæ goblets. The Tirynthian bulwarks, however, and the most rudely-constructed portion of the Mycenæ citadel-walls, as well as the shaft-graves within the slab-circle, must belong to an older era. We shall not sin against the authority of tradition, according to which the Pelopidæ were preceded here by the Perseidæ, if we consider this group of erections as synchronous with the latter. A pit cut in the rock is earlier in time than a circular grave provided with a door capable of being opened to let in other bodies—in which to celebrate commemorative festivals. the same with the vases found in the royal necropolis. style which they exhibit differs somewhat from the pottery collected, whether in the dromos of the domed-buildings, the upper layers of rubbish surrounding these, or on the acropolis. For the forms seen on the sherds picked up here belong to vases of later date; they foreshadow the near approach of a new system, that which archæologists designate as the "dipylon style."1 Changes in matters of taste were not brought about in a day, especially among the tribes distributed around the Ægean, on whom the action of foreign influences was too feeble to have hastened the spontaneous evolution of the plastic faculty. intense life and fruitful prosperity went on uninterruptedly for centuries together in the Mycenian commonwealth is certain; but we know nothing of its struggles and vicissitudes during the course of its career, except what we learn from the Epic, where such events and personages as are singled out assume an exaggerated importance at the expense of all besides, which is either deliberately set aside or forgotten. That it was populous is proved from its buildings, implying as they do numerous trained hands to carry out any scheme the native princes might devise. Henceforward the instances of this culture divide themselves into two distinct periods; in the first are placed objects of every kind which Schliemann brought out of the royal graves on the acropolis, and in the second glass-pastes, fibulæ, and iron. To this final stage of Mycenian culture belong the domed-buildings of Argolis, Orchomenos, Menidi, and Amyclæ, together with the vaults of Palamidi and Spata.

Considered as a whole, Mycenian art lends itself to yet another distinction. Whilst objects designed for common uses have reached us in such quantities as to cause weariness when examined at close quarters, time has spared a very small number of those monuments which partook of a public and almost national character; such as the Lions Gate, the sepulchral stelæ of the Mycenian acropolis, the gold cups meant for the royal table, even to the frescoes of the Tirynthian palace. We have on the one side a monotonous and somewhat crowded wealth, and on the other a few highly-interesting specimens which imply many more now disappeared. The existing examples are inadequate to show us under all its aspects the activity of artists entrusted with the execution of works, the beauty of which was to reflect distinction on both clan and its hereditary princes. In the products of this art, however, we discern two different tendencies,

¹ That is to say, Early Geometric style.—Trans.

the flow of two divergent currents, we might almost say of two opposed arts, the offspring, no doubt, of the parent-mind, and as such mutually helpful on occasion to each other, but yet not moved by quite the same spirit. There is an aristocratic and royal art, kept alive by architects who build princely residences, painters who decorate stately megarons, sculptors who glorify kingly exploits or personify the power of the monarch in the bold symbol of a fierce lion watching at the city gates, metalworkers who chisel in the precious metals the image of the scenes of battle and the chase of their master. Then there is a popular art, which is carried on by simple artisans, who necessarily work for all sorts and conditions of men; such as cabinet-makers, who enrich chairs, couches, and the like with bone and ivory, so as to invest the domestic abode with an air of elegance and refinement; nor should jewellers who turn out inexpensive ornaments be left out of the reckoning. These must have been fully employed amidst youthful communities, as fond of outward show as children and savages. I picture them not unlike those wandering jewellers, Wallachian by birth, but originally from Pindus, with whom I often came across during a tour I made in Roumelia, as they pounded on from village to village, with a pair of bellows, crucibles, and moulds, with chisels and pincers, taking from the women-folk of each household the little stock of the precious metal which has been put together for many a month against their coming. Their portable stove is lit on the village green, and presently each one receives her due in the form of ear-rings, pendants for necklaces, clasps and plates to fasten on the breast. The shapes and forms are of course very few, but the customers are quite satisfied with types to which their eyes have grown accustomed. And above all, there is the potter's art, which may be called the poor man's pre-eminent art. Its shapes are as many as the needs it has to satisfy; its works are exposed to countless accidents, but fortunately they can be easily replaced. The imagination of the potter is thus kept on the alert; for he must be able, under exceptional conditions, to produce easily and on the spur of the moment. The juxtaposition of ceramics with sculpture will make us realize the difference of intent and tendency between the two.

We pointed out the noble and ambitious efforts of sculpture, its marked preference for the display of strength and fervid movement, the secret instinct which induces it to seize the leading lines of form, and make it stand forth from minor details. adverted to the fact that Mycenian sculpture, owing to the qualities and tendencies exhibited in some of its works, is the harbinger of Greek sculpture. This will not only never tire of studying nature with passionate curiosity, but will show great discrimination in the choice of its models, and single out from these the noblest and most expressive features, so as to create types distinguished by as much truth and far more beauty than it is possible to find in concrete reality. The artist of the Lions Gate and of the Vaphio vases has not yet reached this high standard; his aspirations are in advance of his technical skill; his face, however, is already set in that direction, and moves towards a goal which, mayhap, he would have reached. had not the Dorian invasion arrested him in the full tide of his progressive efforts. Whilst this predecessor of the Greek sculptor turned out works that were as the introduction to the brilliant masterpieces of the future, the ornamentist strove to expand the elements handed down to him by an era that had known no figures except incised ones. Geometric design is everywhere the first instinctive manifestation which induces man to adorn any work to which he puts his hand. Here it developed more especially under the influence of metal industries; the mind of the artificer succumbed under the spell of the marvellous "firearts"; which to the folk of that early date appeared as nothing short of magical. No matter the material which the mechanic attacked, he always turned to pliant metal as his guiding star. He strove to imitate the unending curves made by bronze and gold strips or threads, either naturally or with artificial means. When wishful to enrich his repertory, he turned to the living world, where he was first of all attracted by mollusks with long sinuous feelers, because they more than reminded him of those scrolls and spirals of which he was enamoured, in that he could almost transfer them as they stood to make up his habitual designs. Once his attention was drawn in this direction, he passed on to other organic bodies of the same nature, and such insects as furnished him with his beloved curvilinear figures in the shape of antennæ, along with the flexible stems of plants and budding flowers.

We have watched him as he stood before his models, at first

striving to reproduce them with the minute and childish fidelity which characterizes Japanese art, and when in the next stage he simplified the forms and rendered them in a thoroughly conventional manner. The first impulse is to study Nature; as soon as we think we know her, we look away and reproduce types to which the hand has become habituated, almost mechanically and without a change. The organic forms which the potter tried to imitate were too few in number, and their structure much too elementary, not to have led betimes to common-place interpretation.

From the graves in the acropolis have come the finest ornaments, and pottery exhibiting brilliant glaze and quaint decoration. The qualities which characterize the vases of this class recur on specimens collected in other localities; hence we may safely infer that they all belong to the same era, and were turned out by the same workshops. The products of the following period show a less sincere execution, and work hastily and easily done. The stock-in-trade of this popular art was poor enough, and, as it asked for no help of the stranger, it ere long came to a stand-still.

The case seems to have been different with what we have called the royal art. As the wealth and influence of the prince increased, the architect was required to build statelier and nobler edifices. As to the painter and the sculptor, they greatly widened their horizon when they attacked the human and animal figure. Thus, they depicted wild beasts which the king brings down, or the horse which draws his chariot, etc.; in so doing they measured their strength with models which interested them, and their talent was all the better for their ambitious effort. Vaphio vases were discovered in a domed-tomb, and there are no valid reasons why they should not have been chiselled for the prince who had them buried with him. That such a conjecture is not against reasonable probability, is shown from other works belonging to the last days of Mycenian art, conspicuous like these for correctness and firmness of design. Such would be the bas-relief of the Lions Gate, the Abbia figure of bronze (Fig. 351), the Mycenæ silver vase, on which men's masks are portrayed (Fig. 374), and the best ivories (Figs. 373, 379-381). The expansion which so great a variety of themes gave to painting and sculpture never ceased until the fall of the Achæan dynastics of Argolis and Laconia.

Did our judgment rest on the sole testimony of the monuments, we should none the less divine that there came a day when Mycenian art had to yield to another art, that of archaic Hellas. Thus, at a feeble depth from the present level of areas enclosed by Cyclopæan walls, sherds of the eighth and seventh centuries are picked up; and on the soil and ruin of the Tirvnthian and Mycenian palaces the explorers have come across the remains of Doric temples. We should doubtless have been justified to infer from this progressive change of styles that events such as subversion of dynasties and commonwealths had taken place in the centuries intervening between the two eras, but we could not have proved our case. Fortunately it is found that tradition, though so halting and uncertain throughout the primitive age of the Grecian world, assumes almost the consistency of history, from the very threshold of the following period, ushered in by conflicts in consequence of which part of the population is driven from European Hellas to Asia and the adjacent isles. The tales dealing with these struggles and violent displacements are still mixed up with matter of a fabulous nature; but the sequence of the facts is well established. Such convulsions and movement of migration were no doubt induced by what the ancients called the "return of the Heraclidæ," and which we term the Doric invasion.

At this distance of events upon which no contemporary information sheds any light, it is impossible to estimate the effects of an invasion, implying wholesale plunder, destruction, and cruel hardships of every sort, such as a sudden and abiding influx of population could not fail to bring about. We cannot doubt that all these collisions and expulsions caused the march of progress to stand still, or rather to recede. When the Dorians overran Peloponnesus and laid waste the country, storming citadels or starving out the defenders, there occurred an unavoidable interruption in the direct or indirect relations between towns boasting to have had heroes from over the sea as their founders, and Phrygia, Caria, Lycia, Phœnicia, and Egypt. Maritime trade, either brought to a deadlock or greatly paralyzed, ceased to feed an industry which was fast rising to an artistic level, and had actually reached it in some of its works; so that instead of pursuing its onward course, it must everywhere have languished. and on many a point have fallen to a very low ebb indeed,

Achæan princes had supplied it with precious metals to be transformed into richly-decorated weapons, vases, and ornaments. But as the Dorian invasion broke in upon them, they used all their resources to repulse the common foe; and when all was spent they too had wandered into exile, and with them were dispersed the master-artisans who had received their training in working for them.

The condition of Hellas at the beginning of this period finds a parallel in the Middle Ages. Both stand between an era of constant progress and a spiritual birth when industries, manufactures, and arts resume their onward march. Those centuries which in Western Europe are called modern times find their counterpart in Greece in the period opening with the ninth century B.C., when the great Epics came into existence, and were followed by the rapid and brilliant development of plastic art. In the Hellas of the first Olympiads, as in the Italy and France of the fifteenth century, foreign models greatly contributed to awaken the mind; but in both instances the new activity utilized certain elements of the old culture in carrying out its labours and working its inventions. If we look back from the point we have reached, we embrace at one bound the whole of the ground travelled over by the Grecian mind during the early stages of its evolution, a ground we have seen emerge from the unfathomable depths in which all beginnings are lost; then gradually and almost insensibly we have seen it become lighter with the dawn of poesy; but as we avert our gaze and take leave of it, a flood of light will burst over it under the growing day of history. Each one of these phases has been successively defined and distinguished by us, from the character of the monuments by which they are represented; but it is when their probable date is in question that we feel how great these difficulties are, in the absence of all written documents.

Greek chronographers place the Trojan war at the commencement and the Dorian invasion towards the end of the vast and undetermined space stretching beyond the twelfth century B.C. Geologists are inclined to place the catastrophe of Thera towards the twentieth century B.C.; on the other hand, although the Greeks were aware that the Phœnicians had settled in the island as far back as 1500 B.C., they had preserved no recollection of the disaster. The situation of Thera, at the extreme south of

the Archipelago, is a very isolated one. Nevertheless, it is hard to believe that the disappearance of part of the island, the flight or destruction of all the inhabitants, should have found no echo in insular Hellas. A century is too short a time to allow for the eruption having ceased to be talked about and forgotten, or for all symptoms of subterranean convulsions to have disappeared. Yet all these conditions must have been fulfilled ere man again ventured to set foot on that soil. We are thus induced to lead back to the eighteenth or seventeenth century B.C.; that is to say, to the date or thereabouts of the geologists. On the other hand, the products of human industry found under volcanic substances at Thera point to a more advanced culture than that of the second Trojan village, or of the first establishment at Tiryns. We shall be well within the mark, then, in placing towards the year 2000 B.C. the formation of the first sedentary groups that got domiciled on the hills of the Troad and of Argolis. The slow and obscure development of the primitive island culture would come in between that distant age and the time when the walls of Tiryns and Mycenæ were erected. Some of the Cyclades would appear to have been more populous at that time than they ever were afterwards. There was a great dearth of the precious metals, especially gold; but marble was The oldest Cypriote settlements would belong to the same epoch. In turning to buildings such as those of Tiryns, Mycenæ, and Orchomenos, one would wish to reach a more precise date; but here, too, tradition contains nothing that will serve our turn. We are obliged, then, to ask if the Mycenian world at that time was likely to have dealings with some neighbouring people, in possession of a written history from which higher criticism may obtain information that will help it towards an approximate chronology. Now, so far as I know, the only people answering these conditions are the Egyptians. sequence of the reigns and of the main facts of the New Empire is so well established that the most cautious historians of Egypt hold that they can creep back from the Saït Pharaohs, whose date appears in the Greek analysts, to the great conquerors of the Eighteenth and Nineteenth Dynasties, without meeting serious lacunæ on their path likely to falsify their calculations.

The inhabitants of the Ægean coasts were separated from

Egypt by a sea that can be easily crossed in fine weather. The mariner who sails southward from Crete finds himself nearing the low beach of the Delta, almost as soon as he loses sight of the snow-capped mountains of his own island home; whilst a narrow sound alone intervenes between Cyprus and Phœnicia; the latter, as is well known, was for a long time like a province of the Pharaohs. There were, then, plenty of opportunities for intercourse between Egypt and Phœnicia on the one side, and on the other with the Ægean clans. This much being clear, it remains to consider whether we can prove that such relations did actually exist as far back as the Mycenian period.

The answer will have to come from the Egyptian quarter, for there alone shall we find documents of an authentic character. Now these relate—and their testimony is scarcely open to doubt—that between 1550 and 1500 B.C., in the age of Thothmes III., the "Great Verdant isles and those in mid-sea" were among the countries dependent upon Egypt; whilst on the stela of Thothmes the name of "Asi," i.e. Cyprus, occurs.\(^1\) Very similar formulæ return in the inscriptions of Amenophis III. and Amenophis IV.; they re-appear towards 1350 B.C., in the reign of Ramses II., of whom the Greeks said that he had subdued the Cyclades. Was

¹ Stela of Thothmes. The monuments of the age of this prince repeatedly mention functionaries into whose hands the tribute of these insular populations was paid. Thus, on a gold cup preserved in the Louvre Museum, the royal scribe Tehuti says of himself that he is the trusted minister of the king for foreign parts, notably for the "mid-sea islands" (BIRCH-CHABAS, Mémoire sur une patère égyptienne). The name also occurs in another inscription from the Rekhmarâ tomb, of both the Rutennu and the northern people occupying the country to the rear of the "Most Verdant" (Mediterranean), together with the Kaft (Phœnicians), and the inhabitants of the "Most Verdant," who bring their tribute, chiefly composed of gold and silver vases, ewers, craters, etc. Their dress consists either of a striped petticoat or one broidered with many colours, and shoes fastened around the legs with thongs (VIREY, Le Tombeau de Rekhmarå; Mémoires de la mission française). The epigraph, although mutilated, can for the most part be easily restored. It reads as follows: "The Kaft chieftains and those of the islands come in peace, bringing their tribute on their shoulders. When they heard of the victories of his Majesty Thothmes over all the peoples [of the earth], they forthwith bent their back and inclined their head before his souls."* We hear of the isles in the middle of the sea down to the time of Amenophis (Rosellini, Monumenti storici), whose ships sail out to sea and bring the tributes of all the nations (MASPERO, l'Inscription dédicatoire du temple

^{[*} His effigies, portraits, statues—or force, spirit, energy, as evidenced in his acts.—Trans.]

this suzerainty of Egypt over the isles of a substantial or purely honorific character, which took the shape of annual presents made to the lords of an empire which at that time suffered no comparison? That we cannot answer the question matters little. What we had at heart to show is that the Egypt of the Theban dynasties and the tribes scattered on the islands and the coasts of the Ægean did not constitute two separate worlds. These restless turbulent tribes were willing enough to submit to a strong Egyptian supremacy; but as soon as they saw the reins of government slacken through inner discords, they lost no time in falling upon so rich a prey. Thus, towards the middle of the fourteenth century B. C., several of them allied themselves with other clans banded together against Ramses II. Antiquity has handed down the tale of the adventurous humour of the Pelasgi or Tyrsenians, the "most roving race ever seen," says Herodotus. Now, could the habits and name of the Tyrsenians be nearer than they are to the Toursha, who, in the days of Ramses II., invaded Egypt in concert with Libya? Again, there is no difficulty in recognizing the Achæans in the Aquaïousha who, in the reign of Menephtah, tried to force the western frontier of Egypt, along with the Toursha, Leka, Shardana, and Sakalousha. Such incursions are perhaps faintly remembered in the story which Odysseus relates to Eumæus. The hero styles himself a Cretan who had effected a descent in Egypt, together with other freebooters. The African shore had been reached after a voyage of but five days; they had sailed up one of the mouths of the river, and hid themselves among the rushes; whence they had presently stolen out to loot peaceful homes, carrying off women and children to their ships. They had loitered over-much in that rich plain, so that the inhabitants had had time to call in reinforcements from the nearest town, and together they had put the marauders to flight and captured their leader, whose life, however, had been spared. He seems to have been of a thrifty turn of mind, for he realized quite a fortune during the seven years which he spent in Egypt.

The result of excavations carried on in Egypt shows that the Pelasgi and Achæans had large commercial dealings with the Delta. Since the distinctive peculiarities of Mycenian pottery have been established, many a specimen has been identified among objects collected in the tombs of that country. In the

necropoles of the Eighteenth and Nineteenth Dynasties, Prof. Flinders Petrie has discovered what he calls Ægean pottery.' Many vases preserved in our museums, although bought in the Nile Valley, bear upon them the unequivocal characteristics by which the Mycenian style is distinguished. From this we may infer that the Egyptians of that day admired a pottery widely different from their own, because of its brilliant glaze and quaint decoration.

Recognizable among the valuable objects presented to the Pharaohs by the envoys of tributary populations, are vases distinguished by the shapes and forms affected by Mycenian ceramics and Mycenian metal-work. In regard to imports, Egypt, like other nations at that period, gave in exchange raw products from her soil and home manufactures. Hence it might have been expected that Egyptian wares would turn up on some points of the Ægean, and this has actually come about. We have pointed out how glass-pastes were utilized in the decoration of the Tirynthian palace; and we know that glass-making came into existence on the banks of the Nile, where Phœnicians learnt how to make it. The paste introduced into the frieze at Tiryns is of that vivid blue which the Egyptians knew how to impart to what they called khesbet, or χεσβετ. On the other hand, plaques of blue enamelled earthenware or faience, a style of pottery which found great favour with the Ramessides, have been unearthed at Mycenæ. Here, too, as well as at Ialysos, have been discovered scarabæi, inscribed with hieroglyphs, and daggers decorated with scenes of the chase inspired by Egyptian models; the ornament seen on them, a species of inlay, was in vogue in Egypt during the Eighteenth Dynasty.2 The fictitious type of the sphinx had its birth in the Delta, and the Mycenian

¹ See FLINDERS PETRIE, Ten Years' Digging in Egypt, 8vo, London 1893, and his article, "The Egyptian Bases of Greek History" (Journal of Hellenic Studies). His assertions were challenged by C. Torr, Classical Review, 1892. The discussion was also carried on in a series of letters in the Academy of the same date. The presence of Ægean pottery in the deposits of the Twelfth Dynasty is anything but proved; but there is greater probability of its having made its appearance during the Eighteenth and Nineteenth Dynasties. An able exposition of the facts of the case also appeared in the Classical Review, 1892, from the pen of Cecil Smith. But no conclusions are reached.

² See dagger with metal incrustations from the tomb of Queen Aah-Hoteb (C. Daly, *Revue de l'architecture*, 1860, and Maspero, *l'Archéologie égyptienne*). On Egyptian damascening, consult Wilkinson, *The Manners*, &c.

ornamentist frequently introduced it into his work in a slightly modified form. One, if not his most elaborate piece of handiwork, is the Orchomenos ceiling; the decoration, like that of certain ceilings of the Theban tombs, consists of rosette borders, and flowers of the lotus surrounded by scrolls and spirals. Was the design borrowed from an Oriental carpet, or were there then—as now in Italy and Southern France—painters that went from place to place among the islands of the Archipelago and Greece proper, carrying enormous rolls whereon patterns were traced, out of which customers made a choice according to their taste and means?

We have evidence that intercourse was rife between Mycenian Greece and Egypt during the Eighteenth and Nineteenth Dynasties. The names of Queen Ti and her consort, Amenophis III., have been read on scarabæi and sherds of Egyptian enamelled ware, discovered on Grecian soil. It is quite possible that scarabs bearing the names of these two sovereigns were taken there by trade long after their reign. Factories chiefly engaged in producing for export did not scruple to engrave on their wares the label of famous Pharaohs who had died centuries before. Hence scarabs and vases may have been antedated, through a whim or the craftiness of the workman. Yet will not the hypothesis lose much of its probability, when we remember that no royal cartouches except those of the princes and princesses of the Eighteenth Dynasty have been discovered at Ialysos and Mycenæ up to the present time? Had these been purely fanciful formulæ, would they be quite so uniform? should we not find some attempt at variety?2

² The following list is by no means complete, but it has the merit of containing none but objects of undoubted Egyptian origin:

- (1) Ornaments of enamelled earthenware (faïence) (SCHLIEMANN, Mycena).
- (2) Ditto, fragment of helmeted head (SCHUCHARDT, Mycenæ).
- (3) Scarabæus of Queen Ti, from Mycenæ (Έφημερίς, 1887).
- (4) Scarabæus of Amenophis III. from Ialysos, and other scarabæi of Egyptian manufacture (Mykenische Vasen).
- (5) Fragment of enamelled earthenware bearing the name of Amenophis, read by Ermann (Έφημερίς, 1888).
- (6) Two ditto plaques, also picked up at Mycenæ, with the cartouche of an Amenophis which Ermann identifies with Amenophis III. ($E\phi\eta\mu\epsilon\rho i\varsigma$, 1891).

¹ PRISSE D'AVENNES, Histoire de l'art en Égypte, plates entitled, Ornementation des plafonds. See two ceilings from the tomb of Nefer-Hotpou, which bear a close analogy to the Orchomenos example (Mémoires de la mission du Caire).

The advent of Amenophis III. to the throne is placed towards 1450 B.C. The tombs and domestic abodes in which the objects in question have been picked up cannot be older than the above date; and the chance of their being more recent is very remote indeed. We cannot go wrong if we place the heyday of the Mycenian civilization somewhere about the middle of the fifteenth century B.C. Scarabæi and broken pottery are from buildings apparently younger than the shaft-graves on the acropolis, so that we must creep farther back into the past to reach the era when the first blocks of the formidable circuit-wall were set up against the rock.

Assuming that Greek chronographers were correct in placing the Dorian invasion of Peloponnesus towards 1100 B.C., it follows that Mycenian culture lasted four or five hundred years in Greece proper, and reached its zenith about the fifteenth or fourteenth century B.C., rather than in the period immediately preceding the fall of the Achæan royalties. Those who have studied the remains of the structures of Tiryns and Mycenæ on the spot have almost always found careless construction on such points as show traces of successive repairs and re-handlings. When the northern tribes fell upon southern primitive Greece, they found a weakened and decadent country. Granting that direct relations existed at that time between Hellas and Egypt, we cannot suppose that all the ivory and lustrous earthenware contained in the tombs were fetched from the banks of the Nile by Pelasgi and Achæans. About this time, Cyprus, Rhodes, Thera, and the sea-board of the Ægean began to receive colonists from Phœnicia. These vassals and privileged brokers of Egypt offered to the natives the raw materials or wares which they obtained from the Delta and Anterior Asia, or had fabricated themselves. the exotic objects found at Mycenæ are some that have nothing Egyptian about them; on the contrary, they rather approach types invented or popularized by Phœnician industry. Such would be the gold simulacra representing either Ashtoreth, surrounded by the doves sacred to her, or her temple (Figs. 288, 289).

The question has been asked if, among the influences exercised on Mycenæ, we should not include that of the Hittites or Syro-Cappadocians? Between these and the clans domiciled on the eastern shore of the Ægean there were no doubt many

But the Mycenian art, with its intense feeling points of contact. of life, soars far above the culture of Northern Syria and Cappadocia: the latter is singularly deficient in the inventive faculty throughout its career, never having risen above mere conventionalism.1 Phrygia has also been named;2 lions—separated by a column or a vase—in front of each other, are beheld on several. Phrygian tombs. So, too, analogies are observable between the two sets of ornament; but there are inscriptions on apparently the oldest tombs of the Phrygian necropoles, and the shapes of some of the letters seen there are already farther removed from their Phœnician prototype than in certain varieties of the Greek alphabet. This is because the reigns of the princes whose names are read on these fronts are placed between the ninth and seventh centuries B.C. The Phrygian style, then, can only be considered as the prolongation and the tag-end, if the expression be allowed, of Mycenian art.

Whatever Mycenæ may have derived from Phrygia was not gotten from the Phrygia lying away on the banks of the Sangarius; but from a much older Phrygian state, whose existence was alone remembered by tradition, and whose centre rose at the foot of Mount Sipylus. Here had been enthroned Tantalus, the father of Pelops, and on the sunny side of the hill are still seen the ruins of some forty tumuli, or cones of masonry resting on circular bases. They cover a domed-shaped chamber which gives the impression of a natural vault. The type, in small, is that of the cupola-buildings of Mycenæ. The tumulus shape is better adapted to and probably originated in a flat country, rather than a hilly region like Anatolia, where the rock comes to the surface

¹ Respecting the analogies referred to above, see Mykenische Vasen; SAYCE, Ilios; TSOUNDAS, 'Εφημερίς, 1888; and above all, WINTER, Arch. Anzeiger, 1890. The points of resemblance, however, are more apparent than real. The conventions which Winter has detected on the two sets of monuments suggest rather the notion of the imperfect technique of beginners. Affinities may be allowed to exist in the decoration strictly so called (Heuzey, Origines orientales). Interchange of small objects may, likely enough, have been carried on between Asia Minor and the Ægean.

² The opinion referred to above is expressed by Prof. Ramsay, *Journal of Hellenic Studies*. To suit his theory, however, that the bas-relief of the Lions Gate is copied from a Phrygian model, he is obliged to place it in the middle of the eighth century B.C., and ascribe it to the Dorian kings of Argos. But, as it seems to us, the facts set forth in the foregoing pages are diametrically opposed to his hypothesis.

and lends itself to receive the dead. If, as held by antiquity, the Phrygians are of Thracian origin, they would naturally have taken with them, in their transit to Asia Minor, their ancient mode of sepulture; and the style would have been retained by a Phrygian dynasty when it crossed over and settled in European Hellas. Here the building expanded in the hands of more skilful masons, and from Mycenæ spread all over the peninsula. It is a specious conjecture, in that it accounts for the introduction of a mode of sepulture into Peloponnesus not likely to have been suggested by the nature of the ground.

Another hypothesis ascribes the construction of the Argolic citadels, and the invention of the style we have called Mycenian, to the Carians.1 The ancients, it is argued, related that the Carians were a war-like and sea-faring people; that in concert with the Leleges they had once occupied the most part of the islands, and many a spot on the coast of the Hellenic peninsula. According to Herodotus, no nationality could measure their strength with the Carians in the days of Minos. Does not this manifold information authorize us to consider them as the inventors of a style whose most distinct and quaintest forms are derived from the maritime fauna? Remembering their peculiar mode of life, all we have to urge against the theory is that the Minyi and Pelasgi, the Ionians and Achæans, spread likewise along the brinks of bays and sounds, and sailed their barques quite as often and as far as the Carians; that when the latter were driven back towards the east by the former, and massed themselves in the region to which they gave their name, they neither elaborated an architecture or sculpture of their own. Nevertheless, this people, during its brief passage on the European side, is credited with the creation of an incomplete and unequal art no doubt, yet instinct with power and sincerity; even though when domiciled in a land where everything combined to favour and stimulate intellectual activity, it was struck with irremediable sterility! Would not the phenomenon be passing strange and unaccountable?

¹ The hypothesis in question has been advanced by U. Köhler, *Ueber* der Zeit und den Ursprung der Grabanlagen in Mykenæ. The theory is accepted by Dümmler and Studniczka, but they refuse to see Achæans in the lords of Mycenæ (Athenische Mittheilungen: Zur Herkunft der Mykenischer Kultur).

What we descry is this. The Carians were one of the restless swarms which, for centuries, whirled round the Ægean, now at enmity with one another, now combining together to break upon Syria, the Troad, or Egypt, as might serve their turn. Contact between these tribes, through war and traffic, was sufficiently intimate to have induced an almost uniform style of ornament and industrial processes. We have no serious reason to think that the Carians took a prominent part in the invention of the processes and forms in question. But among the objects that have reached us, a certain proportion, likely enough, comes from Carian settlements. Fortified walls and domed-tombs have been sighted in Caria, and published by us in a former volume.1 Such erections do not appear to lead back to high antiquity; but in their construction, as well as in the inner and outer details of the tombs, and the ornament beheld on clay squares and pottery, we divine the abiding influence and survival of the Mycenian style.

If the Carians and Phrygians remained, in cultured ways, exactly as they were when they separated from clans with which they had been intimately bound up, ere the Hellenes constituted themselves into a nation, it is no reason why we should attribute an initiatory part to them out of proportion with their spiritual mediocrity, such as it manifested itself in that stage of their existence which comes within the range of history. Relating to the tribes, Æolians, Achæans, and Ionians, in the midst of which the Hellenes sought those heroes whose adventures charmed and fascinated their fancy, the proof they gave, in their ulterior development-along with the latest comers, the Dorians-of a splendid and soaring genius, is our authority for attributing to them the lion's share in the intellectual labours accomplished in The budding forth of their genius was, the primitive period. in all probability, helped by the models which came to them from Egypt and Phœnicia. Who doubts but that their advance was hastened by these suggestions? Their art, however, was assuredly derived from inner consciousness; for in despite of strange forms and a somewhat barbarous display of magnificence, it may be considered as the first chapter, or rather preface, of classic Grecian art.

At the end of this study, we ask ourselves whether we have

1 History of Art: "Phrygia, Caria, Lycia," etc.

succeeded in making the reader share the impression which we felt when we journeyed to the several sites where Schliemann had prosecuted his excavations, in order that we might form a just appreciation of his labours, and have the opportunity of looking long and at close quarters into his numerous finds; with Dörpfeld, we attentively followed the trace of fortifications perceptible almost along the whole extent of the circuit—and noted down by him with scrupulous and minute care—whether at Tiryns or Mycenæ; then a few days afterwards we as eagerly bent over the Trojan trenches—when the names of all these ancient cities and those of their reputed heroic founders surged in my memory, and assumed a meaning and substance such as they never had had before, and for which book-learning had not prepared me. I felt in some wise as the champion of young Hellas, as if I were winning back for her a great piece of her past of which she had been unjustly deprived-eight, perhaps ten centuries of her early existence, in the course of which she had essayed, by slow and laborious apprenticeship, to execute works which were as the prelude of those of her splendid youth and manhood; eight or ten centuries which had well-nigh a history of their own; for if they are destitute of literary documents, and of a narrative recording the events of her infantine days, yet the instances of the art they have handed down to us show a sufficiently-advanced technique to enable us to guess the intellectual bent of that gifted race, how it was even then deeply affected by the spectacle of nature, and its conception of beauty. As I thus gleaned information, such as one who knows how to go to work may excogitate from the manifold objects which bear upon them the impress of thought and intention, my ear grew finer and quicker in catching every sound. of the confused hum and murmur of the Epic tales, wherein the Hellenes account for their mysterious beginnings, and that of their townships, I seemed to distinguish many a faithful vibration, many an echo, of sounds which had filled that world in the distant Surprised at having to acknowledge that recent finds, in many respects, confirm the data which up to that moment had appeared most unsatisfactory, I was led to ask whether ancient writers, Herodotus, Pausanias, and Diodorus, had not gone farther astray in accepting and repeating the traditions current in primitive Hellas, than those sceptical scholars for whom the Iliad was no more than a tissue of fables and of solar myths, who would have received with contemptuous disdain the notion that it might be well to look upon the myths concerned with Io, Danaus, and Cecrops as probable reminiscences of relations which once had existed between Peloponnesus and the Nile valley.

ADDITIONS AND CORRECTIONS.

I. p. 316. Fig. 102. Instead of "above" the grave, read "underneath" it.

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- II. p. 7. The terra-cotta vat represented in vol. i. p. 438, is again figured, vol. ii. p. 7. In order to show the inner decoration beheld on Fig. 169, the front wall of the vase has been left out.
- II. p. 10. M. Tsoundas recognizes a pit-offering in the excavation which occurs at the entrance to the Vaphio tomb (Μυκήναι, p. 149).
- II. p. 13. No sign of cremation has been traced in the island necropoles. But as they are too small to have accommodated whole bodies, it is probable that only bare bones tumbling to pieces were deposited in them (Bent, *Hellenic Studies*, vol. v.).
- II. p. 28. On the pit-graves that have been discovered at Eleusis, Anticyra, near Tiryns, and on the acropolis of Athens, see Tsoundas, Μυκήναι, p. 96, n. 1.
- II. p. 36. In the lateral vault Tsoundas lighted upon a hole having dowels at the bottom, which served to fix a pillar whose function was to support and keep in place the alabaster slabs of the ceiling (Μυκήναι, p. 128). He is the only one who appears to have remarked the detail.
- II. pp. 95, 96. A place of worship, as far back as the Mycenian epoch, may have stood on the site whereon subsequently rose the famous temple of Argian Hera. This site, according to M. Waldstein, should be recognized on the plateau which commands the area of the later temple, and which is supported by a Cyclopæan wall. Both on the plateau and over the second temple were found heaps of ashes, animal bones, and sherds of Mycenian pottery, the result of sacrifices; part of the refuse is still in place, and part has glided down from the upper on to the lower esplanade (Excavations of the American School at Athens, 1892, by C. WALDSTEIN). So far we have but a mere announcement of the discovery. We must fain wait for a fuller account shortly to be published by the excavator.
- II. p. 195. Max Mayer sees a mourner in the bronze statuette Fig. 345, now in the Berlin Museum; and he also ascribes the like function to a number of clay figures, which he compares with the bronze example (Jahrbuch, p. 192).
- II. pp. 254, 255. I forgot to mention that the strange clay vases from Rhodes, Figs. 370, 371, were brought to my notice by Brückner. The paste is reddish-brown, and the surface of the vases is divided into polished bands like the oldest Trojan pottery. There are traces of dull white about the eyes and teeth.
 - II. p. 308. Fig. 426 is also engraved on Fig. 424, 3.
- II. p. 337. To the list of Mycenian bronzes given in the note should be added two male statuettes with long hair from Crete, preserved in the Imperial Museum at Vienna. They are nude, except for a loin-cloth fastened in front with a band, and are executed, writes Furtwängler, in genuine Mycenian style. They have been published in the *Arch. Anzeiger*, 1892.

- II. p. 344. Max Mayer (Mykenische Beitrage, I. Stierfang, in Jahrbuch, 1892) engraves a curious chip from Mycenæ, which he rightly compares with the first Vaphio goblet and the Tirynthian frieze. All that remains of the wild-bull chase figured on it are the upper part of a bull and the man he has tossed. He also recognizes a hunting-scene on a scrap from a box of greenish stone, apparently of the same period. We hold to our opinion, in despite of the objections that may be raised against it, to the effect that in the Tirynthian frieze the painter intended to portray a man running at the side of the bull, and not vaulting on his back or launched in the air.
- II. p. 380. According to M. Augier, keeper of the Clot-Bey collection, the Marseilles ewer (Fig. 477) was purchased at Alexandria by its present owner, and said to have been picked up at Tyre. M. Augier found it in the Clot-Bey collection as far back as 1846, when he became keeper.
- II. p. 399. A vase bought for the British Museum in 1889 (Arch. Anzeiger, 1890) must greatly resemble the specimen from Pitane which I publish. It is thus described: Clay vase in Mycenian style, with the figure of a huge polyp. The space between the tentacles is filled with horses, stags, birds, porcupines, and other animals. Origin: Calymna.
- II. p. 408. The hypothesis as to the superstitions connected with the cuttle-fish is, we think, indirectly confirmed by Clearchus de Soli, in a curious passage which Athenæus reproduces (vii. 317, A). "In by-gone days," says Clearchus, "it was unlawful at Træzen and the neighbourhood to catch polyps of any kind, either that which is called 'sacred,' or sea porpoises or swimming polyps." In the term "sacred," under which this particular polyp is known, and the defence of destroying it, should we not see the survival of primitive beliefs which, as it seems to me, are expressed in the decoration of the Pitane vase? The above text is cited by Karl Tuempel in his dissertation entitled, Der Mykenische Polyp und die Hydra (Festschrift für Johannes Overbeck, 4to, 1893, Engelmann). He has also published, Die Muschel der Aphrodite (Philologus, n. s., t. v. 1892). M. Tuempel finds a connecting-link between the choice of the figures in question and certain ancient religious conceptions.
- II. p. 410. In the Neuchâtel Museum are Mycenian vases which have come from graves excavated at Ithaca and Cephalonia (Von Duhn, H. Schliemann, in Neue Heidelberger Jahrbücher, t. i.).
- II. p. 412. On the result of the recent researches carried out at Troy at the expense of Mdme. Schliemann and the concurrence of the German government, see the report which M. Dörpfeld has just published (*Die neuen Ausgrabungen in Troja*, in *Athenische Mittheilungen*, t. xviii.).
- II. chap. xii. As these pages were ready for the press, we received a dissertation by E. Reisch entitled, *Die Mykenische Frage* (Verhandlungen der 42 Philologen Versammlung). We had no time for careful perusal, but as far as we can judge from a cursory glance we find ourselves in perfect agreement with him on all essential points. His conclusions relating to the character of Mycenian civilization are practically the same as ours. Like us, he sees in the builders of the Cyclopæan walls of Argolis and the cupola-tombs of Eastern Greece the direct ancestors of the Hellenes. With us, too, M. Reisch places the beginnings of the Epos towards the end of the Mycenian period. In it are to be found allusions to events and individual characters, to artistic inventions which belong to that epoch. It is needless to give his conclusions, which the reader can guess for himself.

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